Publication 32

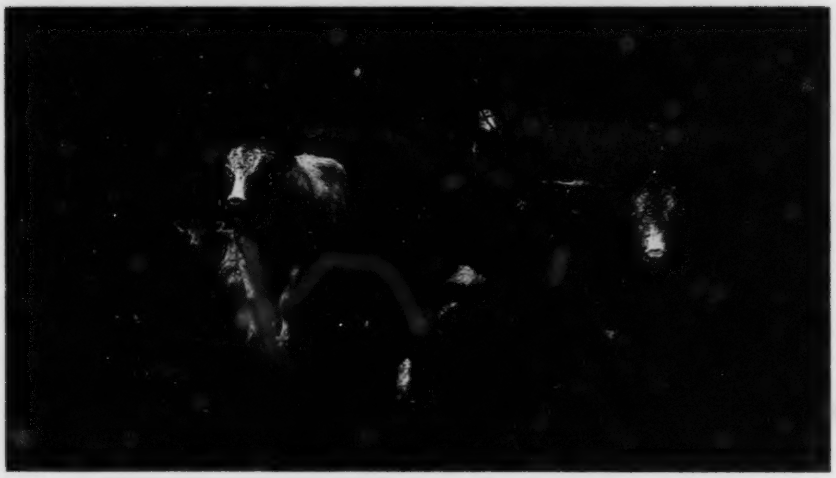
Beef Cow-Calf

Herd Health Monitoring Report

Red Meat II

Ontario 1989

Management Practices and Herd Performance



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Ministère de
l'Agriculture et
de l'Alimentation

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Animal Industry Branch

December 1, 1991.

ACKNOWLEDGEMENTS

Beef Cow-Calf Herd Health Monitoring Report 1989

This report began in small notebooks in the pockets of 1250 cow-calf producers across Ontario. These producers chose to keep individual animal records for the 1988-1989 cow-calf production cycle. They summarized the records into a herd level report and then shared it with others. Their diligence made this description of cow-calf herd performance possible.

The paper trail led to large animal veterinary practitioners, county agricultural offices, the data processing centre in Guelph and finally to Fergus. At each step of the way, owners, veterinarians, Ontario Ministry of Agriculture and Food county office staff and staff in the incentives unit of Red Meat II did their work well. As a result, the questionnaires were complete and very little data was lost.

A look inside these covers will confirm that computers were essential to manipulate the data into information. But first, computers need the data. That job fell to Madeline Jackson. She skilfully entered nearly 50,000 fields and one and a half million characters of data. Mary Van den Borre created the tables summarizing information for individual counties; Arlie Erichsen helped with the graphics and Mary Sinclair created the Ontario map.

Now the information from the data is taking the trail back to producers, veterinarians, county extension staff, students and teachers. Hope you find it useful.

Thank you to everyone who made this report possible.

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Beef Cow-Calf Herd Health Monitoring Report

Ontario 1989

Management Practices and Herd Performance Summaries

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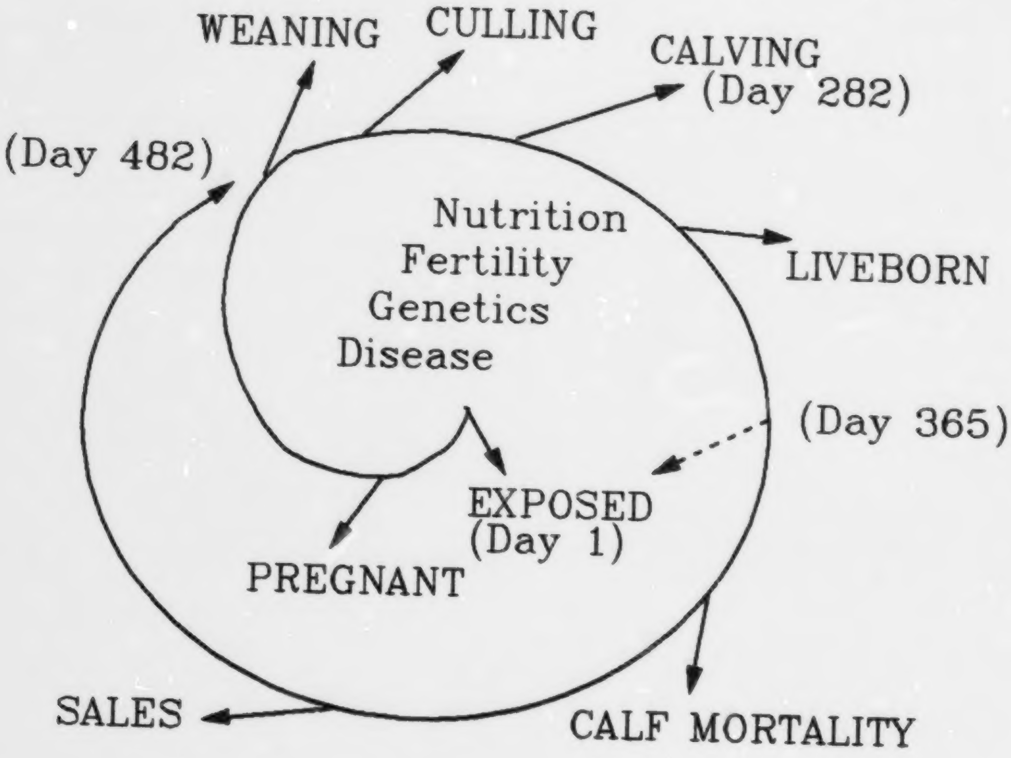
WEANING
CULLING
CALVING
(Day 282)
(Day 482)
Nutrition
Fertility
Genetics
Disease
LIVEBORN
(Day 365)
EXPOSED
(Day 1)
PREGNANT
SALES
CALF MORTALITY

BEEF HERD MONITORING CYCLE

INTRODUCTION

Monitoring Cow-Calf Herd Performance

Two previous studies provided estimates of reproductive performance and management practices used in Ontario cow-calf herds: a 1982 mail survey by Rogers and a more detailed study of 185 herds by McDermott in 1986. This report for 1989 is a continuation of data collection and reporting started by their studies.

On an individual farm, recording health and reproductive events creates a primary surveillance system. Simple calculations allow comparison of actual herd performance to the owner's goals and realistic standards. Thus, the producer, the veterinarian and other consultants have a chance to identify areas of loss and to reinforce success. Also, record keeping permits assessment of health management practices. To be of value, the monitoring of an individual herd requires immediate analysis of records and reporting. This was possible using records for the Herd Health Program of Red Meat II.

Comparisons are only possible when the records from many farms are available to create a report card for counties, districts, regions and the Province. Indeed, this project made creation of a report card possible. The major steps in this health and performance monitoring scheme were data collection, data analysis and reporting.

In this report, the information from the records of many farms gives a view of the Ontario cow-calf industry. It describes management practices in use, reproductive performance, calf survival and calf growth. The information is necessary to develop extension programs and to plan future health and management programs.

Population of Observations

About 1250 cow-calf herd owners completed the questionnaires. Because of missing data, the number of observations used to calculate specific reproductive and health performance summaries is less than 1250. However, the lost data was very minimal for any measure. The data relate to herds participating in a calf weighing scheme and using veterinary service at varying levels.

DEFINITIONS and FORMULAE

The measures of reproductive performance and growth of calves are described by the following definitions.

The response options for **herd management practices used** are yes or no. Polled calves were recorded as such.

The **herd monitoring interval** spans the biological period from exposure to mating through to weaning of progeny from that mating.

A **stillborn calf** is a calf born dead or one which died within 24 hours after birth.

Calving Spread is the time in days from the birth of the first calf to the birth of the last calf.

Open Rate = the number females not calving (or found not pregnant) ÷ the number exposed to mating.

Removal Rate = the number cows removed (breeding sales, culls, deaths) ÷ the number of cows exposed to mating.

Calving Rate = the number of calves born (alive + dead) ÷ the number of females exposed to mating.

Liveborn Calving Rate = the number of calves born alive ÷ the number of females exposed to mating.

Stillborn Rate = the number of stillborn calves ÷ the number of calves born (alive + dead).

Assisted Calving Rate = the number females helped at calving ÷ the number females calved.

Calf Mortality Rate = the number of calves that died between day two after birth until weaning ÷ number of liveborn calves.

Treatment Rate for Calves = the number of calves treated for any illness ÷ the number of liveborn calves.

Weaned Calf Crop Rate = the number of calves weaned ÷ the number of females exposed to mating.

Adjusted Weaning Weight = average 200 day adjusted weaning weight from Beef Herd Improvement Program records. All calves weaned were not always weighed.

Adjusted Pounds Calf Weaned per Cow Exposed = (number calves weaned ÷ number females exposed to mating) x average 200 day adjusted weaning weight.

The following measures describe and summarize interesting features of the population of herds.

Average (Mean)

The arithmetic average is the sum of all the values of the observations divided by the number of herd observations. For normally distributed observations ("bell-shaped" graphs), the mean and standard deviation (STD) would adequately describe the population of herds. That is, 68% of all herds would fall within plus or minus one STD of the average. Since this is generally not the case with this data, measures of location are more useful to describe the population of herds.

Measures of Location

The measures of location are **percentiles.** To compare your herd to others, find the location of your herd performance in the population of herd observations. The **median (50%)** is the central value. It is the middle value when the observations are arranged in ascending or descending order. Half of the herd observations lie above it and half lie below it. For PCTL90, 90% of the observations lie below it and 10% lie above it. For PCTL10, 10% of the observations lie below it and 90% lie above it. The other percentiles are interpreted similarly.

Notes

1. Using the 'number exposed to mating' as the denominator in calculating calving, liveborn calving and weaned calf crop rate causes concern for some individuals. It is the most common method described in the literature. Thus, it is used for consistency in reporting.

2. Cows leaving or entering the herd affect the rates when the denominator and numerator are not adjusted. In individual herds with many purchases or sales for breeding stock, the effect is pronounced. Culling for involuntary reasons also influences the rates. In general, the majority of herds have few removals or additions in a given year.

3. The reader should not judge herd performance based on a single rate or measure (ie calving rate) when using the summary. This general statement holds true for any herd health and performance monitoring scheme. Thus, interpretation of the calculated calving rate should be made considering removal rate.

4. The formulae for calculating calving and stillborn rate in this report differ from those used on the questionnaire form. They are consistent with methods used in the Benchmark study conducted by McDermott, Alves, Anderson and Martin in Ontario.

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Section 1

Beef Cow-Calf Herds

Management Practices Used
and
Herd Performance Summaries
for
All Participating Herds

Table 1. Participation by County for Producers in the Ontario Red Meat II Herd Health Option in 1989

	Number	Percent		Number	Percent
Algoma	20	1.6	Manitoulin	35	2.8
Brant	8	.6	Middlesex	21	1.7
Bruce	140	11.2	Muskoka	1	.1
Cochrane	15	1.2	Niagara	4	.3
Dufferin	23	1.8	Nipissing	9	.7
Dundas	6	.5	Northumberland	19	1.5
Durham.E	12	1.0	Ottawa.Carlton	32	2.6
Durham.W	21	1.7	Oxford	11	.9
Elgin	25	2.0	Parrysound	1	.1
Essex	3	.2	Peel	10	.8
Frontenac	24	1.9	Perth	27	2.2
Glengarry	16	1.3	Peterborough	65	5.2
Grenville	9	.7	Prescott	14	1.1
Grey	115	9.2	Prince.Edward	8	.6
Haliburton	0	0.0	Rainy.River	8	.6
Halton	2	.2	Renfrew	130	10.4
Hastings	29	2.3	Russell	3	.2
Hldmnd.Nrflk	11	0.9	Simcoe	44	3.5
Hmltn.Wntwrth	5	.4	Stormont	5	.4
Huron	61	4.9	Sudbury	17	1.4
Kenora	0	0.0	Thunder.Bay	2	.2
Kent	11	.9	Timiskaming	15	1.2
Lambton	12	1.0	Victoria	73	5.8
Lanark	60	4.8	Waterloo	5	.4
Leeds	12	1.0	Wellington	25	2.0
Lnnx.Add	21	1.7	York	3	.2

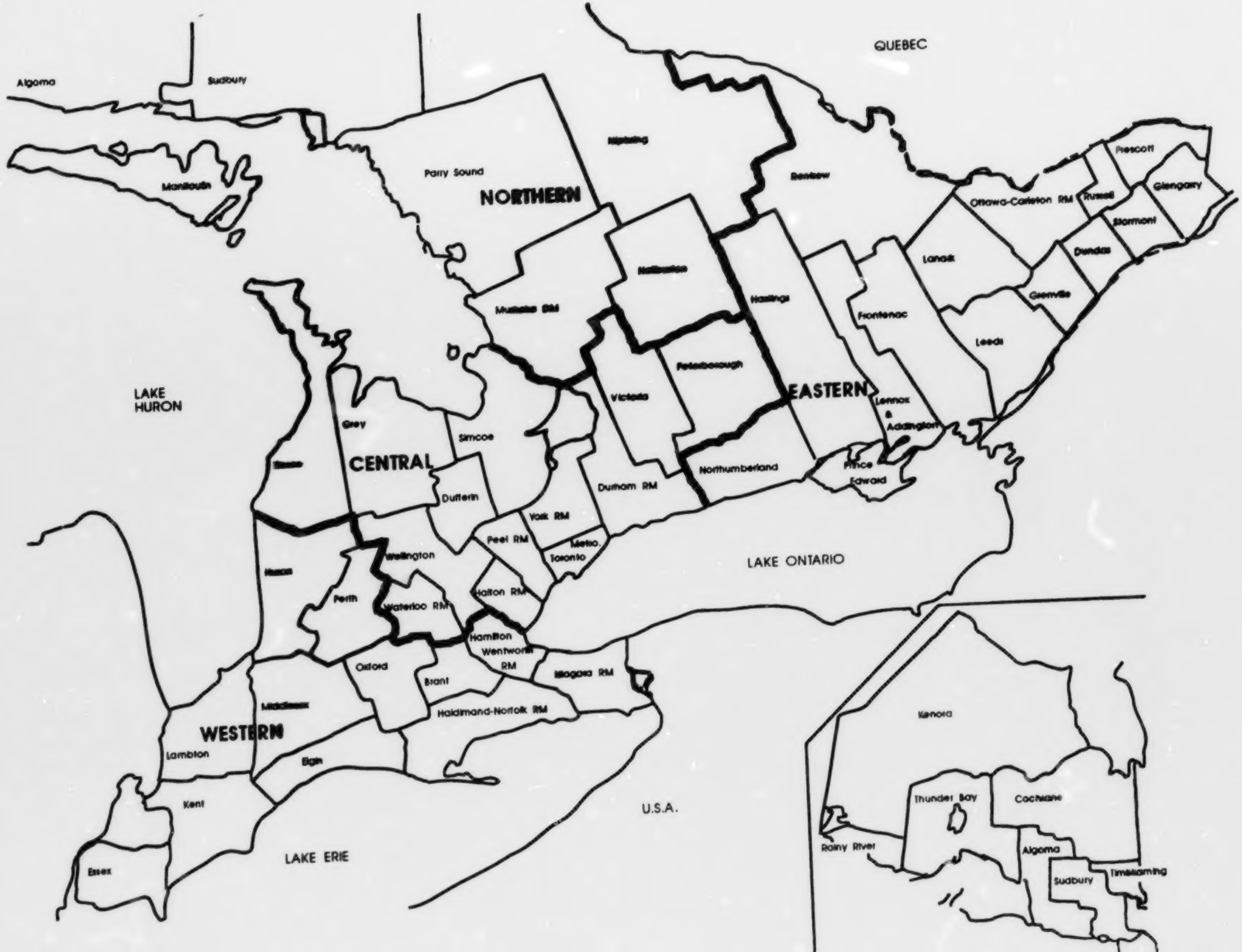
Table 2. Herd Management Practices Used by Producers in the Ontario Red Meat II Herd Health Option in 1989

Management Practice	Number Herds	Number Yes	Percent Yes
Feed analysis	1248	385	30.8
Ration formulation	1248	301	24.1
Pasture improvement/rotation	1248	969	77.6
Pregnancy examinations	1248	974	78.0
Crossbreeding	1248	928	74.4
Bull breeding soundness evaluation	1248	357	28.6
Vaccinations	1248	1048	84.0
Deworming	1248	1029	82.5
Lice/warble treatment	1248	1182	94.7
Fly control	1248	936	75.0
Postmortem examination	1248	585	46.9
Vitamin E-Se injection	1248	1114	89.3
Growth promotants	1248	318	22.5
Early dehorning	1248	728	58.3
Polled	1248	98	7.9
Early castration	1248	852	68.3
Creep feeding	1248	713	57.1

Table 3. Averages and Location of Measures of Herd Performance for Participants in the Ontario Red Meat II Herd Health Option in 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
Number									
Heifers	1187	104	8.5	9.5	18	11	6	3	0
Cows	1220	427	43.2	36.5	80.5	53	33	21	14
Bulls	1192	25	1.9	2.2	4	2	1	1	1
Exposed to Mating	1224	521	47.1	40.4	90	57	36	23	16
Calves Weaned	1224	427	41.4	35.6	79	50	31	20	14
Length of Calving Season									
Calving Spread (days)	1196	365	136.9	79.9	260	180	111	78	56
Breeding Success / Removals									
Open Rate	1220	46	4.1	5.3	10	6	3	0	0
Removed Rate	1200	72	12.5	10.1	26	17	11	6	0
Calving Success									
Calving Rate	1217	135	95.0	8.8	102	100	97	92	84
Liveborn Calving Rate	1220	130	91.7	9.3	100	98	93	88	79.5
Stillborn Rate	1217	38	3.6	4.4	9	6	2	0	0
Assisted Calving Rate	1209	100	10.4	10.4	23	14	8	3	0
Calf Survival and Treatment									
Calf Mortality Rate	1169	66	4.2	6.6	12	6	2	0	0
Calf Treatment Rate	1181	132	20.5	26.8	53	25	11	3	0
Productivity									
Weaned Calf Crop Rate	1218	186	88.4	11.1	100	95	90	83	74
Average 200 Day Adjusted Weaning Weight (lbs)	1205	801	544	71.7	635	589	545	499	450
Weight (lbs) Calf Weaned per Cow Exposed	1199	1259	481	90.6	590	533	478	424	378

NUMBER = number of herds (groups)
MAX = maximum (largest) observation
AVERAGE = mean
STD = standard deviation
PCTL90 = 90th percentile, PCTL75 = 75th percentile, MEDIAN = 50th percentile,
PCTL25 = 25th percentile, PCTL10 = 10th percentile
all rates are expressed as percentages


QUEBEC
Algoma
Sudbury
Manitoulin
Parry Sound
NORTHERN
Nipissing
Renfrew
Muskoka RM
Haliburton
Prescott
Glengarry
Ottawa-Carleton RM
Russell
Stormont
Dundas
Lanark
Grenville
Leeds
Frontenac
Hastings
Peterborough
Victoria
EASTERN
Lennox & Addington
Prince Edward
Northumberland
Durham RM
LAKE HURON
Grey
Simcoe
Bruce
CENTRAL
Dufferin
York RM
Peel RM
Metro. Toronto
Wellington
Huron
Perth
Waterloo RM
Halton RM
Hamilton Wentworth RM
Niagara RM
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Brant
Haldimand-Norfolk RM
Middlesex
WESTERN
Lambton
Elgin
Kent
Essex
LAKE ERIE
U.S.A.
LAKE ONTARIO
Kenora
Thunder Bay
Cochrane
Rainy River
Algoma
Sudbury
Timiskaming

Section 2

Beef Cow-Calf Herds

Management Practices Used
and
Herd Performance Summaries
by
Region of Ontario

Table 1. Counties and frequency of participation in the Red Meat II Herd Health Option, **Central Region** of Ontario, 1989

COUNTY	Frequency	Percent	Cumulative Frequency	Cumulative Percent
BRUCE	140	26.0	140	26.0
DUFFERIN	23	4.3	163	30.3
DURHAM.EAST	12	2.2	175	32.5
DURHAM.WEST	21	3.9	196	36.4
GREY	115	21.4	311	57.8
HALTON	2	0.4	313	58.2
PEEL	10	1.9	323	60.0
PETERBOROUGH	65	12.1	388	72.1
SIMCOE	44	8.2	432	80.3
VICTORIA	73	13.6	505	93.9
WATERLOO	5	0.9	510	94.8
WELLINGTON	25	4.6	535	99.4
YORK	3	0.6	538	100.0

Table 2. Herd Management Practices Used by Central Region Producers in the Ontario Red Meat II Herd Health Option, in 1989

Management Practice	Number Herds	Number Yes	Percent Yes
Feed analysis	538	148	27.5
Ration formulation	538	112	20.8
Pasture improvement/rotation	538	435	80.5
Pregnancy examinations	538	444	82.5
Crossbreeding	538	382	71.0
Bull breeding soundness evaluation	538	163	30.3
Vaccinations	538	453	84.2
Deworming	538	437	81.2
Lice/warble treatment	538	515	95.7
Fly control	538	393	73.0
Postmortem examination	538	264	49.1
Vitamin E-Se injection	538	503	93.5
Growth promotants	538	136	25.3
Early dehorning	538	314	58.4
Polled	538	35	6.5
Early castration	538	356	66.2
Creep feeding	538	315	58.6

Table 3. Averages and Location of Measures of Herd Performance, Central Region, Ontario Red Meat II Herd Health Option, in 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
Number									
Heifers	513	77	7.5	8.2	16	10	5	2	0
Cows	525	427	43.7	36.6	83	54	33.0	22.0	15
Bulls	513	25	1.9	2.4	3	2	1	1	1
Exposed to Mating	523	457	48.0	41.2	92	58	36	24	16
Calves Weaned	526	427	42.8	37.3	80	51	32	21	14
Length of Calving Season									
Calving Spread (days)	514	364	135.8	77.3	250	173	112.5	79.0	56
Breeding Success / Removals									
Open Rate	522	31	3.9	4.7	10	6	3	0	0
Removed Rate	511	67	12.5	9.9	26	17	10	6	0
Calving Success									
Calving Rate	520	135	95.8	8.0	103	100	98	93	86
Liveborn Calving Rate	521	130	92.5	8.6	100	98	94	88	82
Stillborn Rate	520	27	3.5	4.1	9	5	3	0	0
Assisted Calving Rate	518	100	10.8	10.7	23	15	9	3	0
Calf Survival and Treatment									
Calf Mortality Rate	509	66	3.9	6.4	10	6.0	2	0	0
Calf Treatment Rate	505	100	19.1	24.2	47	23	10.0	4.0	0
Productivity									
Weaned Calf Crop Rate	521	122	89.0	9.9	100	95	90	84.0	77
Average 200 Day Adjusted Weaning Weight (lbs)	516	801	543.4	73.5	636	590	545	491	450
Weight (lbs) Calf Weaned per Cow Exposed	511	807	483.9	87.7	593	535	477	428	382

NUMBER = number of herds (groups)
MAX = maximum (largest) observation
AVERAGE = mean
STD = standard deviation
PCTL90 = 90th percentile, PCTL75 = 75th percentile, MEDIAN = 50th percentile,
PCTL25 = 25th percentile, PCTL10 = 10th percentile
all rates are expressed as percentages

Table 4. Counties and frequency of participation in the Red Meat II Herd Health Option, **Eastern Region** of Ontario, 1989

COUNTY	Frequency	Percent	Cumulative Frequency	Cumulative Percent
DUNDAS	6	1.5	6	1.5
FRONTENAC	24	6.2	30	7.7
GLENGARRY	16	4.1	46	11.9
GRENVILLE	9	2.3	55	14.2
HASTINGS	29	7.5	84	21.6
LANARK	60	15.5	144	37.1
LEEDS	12	3.1	156	40.2
LENNOX.ADDINGTON	21	5.4	177	45.6
NORTHUMBERLAND	19	4.9	196	50.5
OTTAWA.CARLTON	32	8.2	228	58.8
PRESCOTT	14	3.6	242	62.4
PRINCE EDWARD	8	2.1	250	64.4
RENFREW	130	33.5	380	97.9
RUSSELL	3	0.8	383	98.7
STORMONT	5	1.3	388	100.0

Table 5. Herd Management Practices Used by **Eastern Region** Producers in the Ontario Red Meat II Herd Health Option, in 1989

Management Practice	Number Herds	Number Yes	Percent Yes
Feed analysis	388	98	25.3
Ration formulation	388	94	24.2
Pasture improvement/rotation	388	290	74.7
Pregnancy examinations	388	288	74.2
Crossbreeding	388	295	76.0
Bull breeding soundness evaluation	388	100	25.8
Vaccinations	388	330	85.1
Deworming	388	310	79.9
Lice/warble treatment	388	362	93.3
Fly control	388	304	78.4
Postmortem examination	388	169	43.6
Vitamin E-Se injection	388	336	86.6
Growth promotants	388	80	20.6
Early dehorning	388	213	54.9
Polled	388	40	10.3
Early castration	388	283	72.9
Creep feeding	388	204	52.6

Table 6. Averages and Location of Measures of Herd Performance, Eastern Region, Ontario Red Meat II Herd Health Option, in 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
Number									
Heifers	370	75	8.9	9.4	20	11	6	4	1
Cows	383	409	41.1	37.9	77	49	29.0	19.0	14
Bulls	371	20	1.9	2.1	3	2	1	1	1
Exposed to Mating	381	521	43.9	41.8	85	51	33	21	14
Calves Weaned	379	423	38.2	36.0	73	44	28	19	13
Length of Calving Season									
Calving Spread (days)	372	364	135.2	79.5	248	186.0	108.0	78.0	56
Breeding Success / Removals									
Open Rate	380	32	4.1	5.3	10	7	3	0	0
Removed Rate	377	58	12.5	9.9	25	17	11	6	0
Calving Success									
Calving Rate	380	129	94.6	9.1	100	100	97	91	84
Liveborn Calving Rate	381	112	91.3	9.6	100	99	93	88	79
Stillborn Rate	380	33	3.5	4.6	10	5	2	0	0
Assisted Calving Rate	379	58	10.3	9.8	23	14	8	4	0
Calf Survival and Treatment									
Calf Mortality Rate	360	39	4.4	6.4	12	6.5	2	0	0
Calf Treatment Rate	372	105	21.1	29.1	83	25	10.0	0.0	0
Productivity									
Weaned Calf Crop Rate	378	186	88.2	12.2	100	96	90	82.0	74
Average 200 Day Adjusted Weaning Weight (lbs)	376	756	551	69.7	638	592	550	508	459
Weight (lbs) Calf Weaned per Cow Exposed	375	1259	486	94.9	588	536	489	433	377

NUMBER = number of herds (groups)
MAX = maximum (largest) observation
AVERAGE = mean
STD = standard deviation
PCTL90 = 90th percentile, PCTL75 = 75th percentile, MEDIAN = 50th percentile,
PCTL25 = 25th percentile, PCTL10 = 10th percentile
all rates are expressed as percentages

Table 7. Counties and frequency of participation in the Red Meat II Herd Health Option, **Northern Region** of Ontario, 1989

COUNTY	Frequency	Percent	Cumulative Frequency	Cumulative Percent
ALGOMA	20	16.3	20	16.3
COCHRANE	15	12.2	35	28.5
MANITOULIN	35	28.5	70	56.9
MUSKOKA	1	0.8	71	57.7
NIPISSING	9	7.3	80	65.0
PARRYSOUND	1	0.8	81	65.9
RAINY RIVER	8	6.5	89	72.4
SUDBURY	17	13.8	106	86.2
THUNDER BAY	2	1.6	108	87.8
TIMISKAMING	15	12.2	123	100.0

Table 8. Herd Management Practices Used by **Northern Region** Producers in the Ontario Red Meat II Herd Health Option, in 1989

Management Practice	Number Herds	Number Yes	Percent Yes
Feed analysis	123	74	60.2
Ration formulation	123	43	35.0
Pasture improvement/rotation	123	101	82.1
Pregnancy examinations	123	84	68.3
Crossbreeding	123	94	76.4
Bull breeding soundness evaluation	123	38	30.9
Vaccinations	139	109	88.6
Deworming	123	109	88.6
Lice/warble treatment	123	118	95.9
Fly control	123	88	71.5
Postmortem examination	123	53	43.1
Vitamin E-Se injection	123	102	82.9
Growth promotants	123	25	20.3
Early dehorning	123	77	62.6
Polled	123	8	6.5
Early castration	123	82	66.7
Creep feeding	123	64	52.0

Table 9. Averages and Location of Measures of Herd Performance, Northern Region, Ontario Red Meat II Herd Health Option, in 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
Number									
Heifers	114	55	9.9	9.8	21	16	8	3	0
Cows	116	194	46.2	32.4	77	58	37.5	25.0	17
Bulls	117	9	1.9	1.4	3	2	1	1	1
Exposed to Mating	123	194	51.3	35.2	90	61	41	29	19
Calves Weaned	123	169	43.7	29.8	81	53	35	26	17
Length of Calving Season									
Calving Spread (days)	122	354	128.6	79.2	263	155.0	102.5	72.0	57
Breeding Success / Removals									
Open Rate	123	46	3.9	5.6	9	6	2	0	0
Removed Rate	121	46	13.3	10.2	27	19	12	5	0
Calving Success									
Calving Rate	123	116	93.7	9.7	100	100	96	92	81
Liveborn Calving Rate	123	110	90.1	9.8	100	97	92	85	77
Stillborn Rate	123	21	3.9	4.3	9	6	3	0	0
Assisted Calving Rate	121	46	8.7	9.0	21	10	6	3	0
Calf Survival and Treatment									
Calf Mortality Rate	114	39	4.5	6.7	14	6.0	2	0	0
Calf Treatment Rate	120	100	23.3	29.1	72	30	11.5	2.5	0
Productivity									
Weaned Calf Crop Rate	123	111	86.7	10.2	100	94	89	80.0	73
Average 200 Day Adjusted Weaning Weight (lbs)	119	786	547	63.9	621	588	548	508	465
Weight (lbs) Calf Weaned per Cow Exposed	119	663	475	75.2	568	527	476	419	378

NUMBER = number of herds (groups)
MAX = maximum (largest) observation
AVERAGE = mean
STD = standard deviation
PCTL90 = 90th percentile, PCTL75 = 75th percentile, MEDIAN = 50th percentile,
PCTL25 = 25th percentile, PCTL10 = 10th percentile
all rates are expressed as percentages

Table 10. Counties and frequency of participation in the Red Meat II Herd Health Option, **Western Region** of Ontario, 1989

COUNTY	Frequency	Percent	Cumulative Frequency	Cumulative Percent
BRANT	8	4.0	8	4.0
ELGIN	25	12.6	33	16.6
ESSEX	3	1.5	36	18.1
HALDIMAND.NORFOLK	11	5.5	47	23.6
HAMILTON.WENTWORTH	5	2.5	52	26.1
HURON	61	30.7	113	56.8
KENT	11	5.5	124	62.3
LAMBTON	12	6.0	136	68.3
MIDDLESEX	21	10.6	157	78.9
NIAGARA	4	2.0	161	80.9
OXFORD	11	5.5	172	86.4
PERTH	27	13.6	199	100.0

Table 11. Herd Management Practices Used by **Western Region** Producers in the Ontario Red Meat II Herd Health Option, in 1989

Management Practice	Number Herds	Number Yes	Percent Yes
Feed analysis	199	65	32.7
Ration formulation	199	52	26.1
Pasture improvement/rotation	199	145	72.9
Pregnancy examinations	199	158	79.4
Crossbreeding	199	157	78.9
Bull breeding soundness evaluation	199	56	28.1
Vaccinations	199	156	78.4
Deworming	199	173	86.9
Lice/warble treatment	199	187	94.0
Fly control	199	151	75.9
Postmortem examination	199	99	49.7
Vitamin E-Se injection	199	173	86.9
Growth promotants	199	77	38.7
Early dehorning	199	124	62.3
Polled	199	15	7.5
Early castration	199	131	65.8
Creep feeding	199	130	65.3

Table 12. Averages and Location of Measures of Herd Performance, **Western Region**, Ontario Red Meat II Herd Health Option, in 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
Number									
Heifers	190	104	9.2	12.2	19	12	6	3	0
Cows	196	203	43.9	35.3	81	55	34.0	20.5	14
Bulls	191	15	2.2	2.3	5	2	1	1	0
Exposed to Mating	197	214	48.3	38.4	90	58	35	22	16
Calves Weaned	196	192	41.9	33.2	77	54	31	20	14
Length of Calving Season									
Calving Spread (days)	188	365	148.9	86.9	286	202.5	119.0	83.5	57
Breeding Success / Removals									
Open Rate	195	31	4.9	6.4	13	7	3	0	0
Removed Rate	191	72	12.1	10.8	27	16	10	5	0
Calving Success									
Calving Rate	194	118	94.8	9.4	102	100	97	92	82
Liveborn Calving Rate	195	112	91.3	10.1	100	99	93	88	78
Stillborn Rate	194	38	3.8	4.6	9	6	3	0	0
Assisted Calving Rate	191	100	10.7	11.5	21	14	8	4	0
Calf Survival and Treatment									
Calf Mortality Rate	186	56	4.2	7.1	11	6.0	0	0	0
Calf Treatment Rate	184	132	21.1	27.1	50	24	12.0	4.5	0
Productivity									
Weaned Calf Crop Rate	196	140	88.2	12.4	100	96	90	82.5	73
Average 200 Day Adjusted Weaning Weight (lbs)	194	750	531	73.9	628	574	527	480	434
Weight (lbs) Calf Weaned per Cow Exposed	194	833	469	97.2	600	518	460	406	368

NUMBER = number of herds (groups)
MAX = maximum (largest) observation
AVERAGE = mean
STD = standard deviation
PCTL90 = 90th percentile, PCTL75 = 75th percentile, MEDIAN = 50th percentile,
PCTL25 = 25th percentile, PCTL10 = 10th percentile
all rates are expressed as percentages

Section 3

Beef Cow-Calf Herds

Management Practices Used
and
Herd Performance Summaries
for
Individual County or District

Table 1. Herd Management Practices Used by Algoma District Producers in the Ontario Red Meat II Herd Health Option, in 1989

Management Practice	Number Herds	Number Yes	Percent Yes
Feed analysis	20	13	65.0
Ration formulation	20	10	50.0
Pasture improvement/rotation	20	16	80.0
Pregnancy examinations	20	13	65.0
Crossbreeding	20	14	70.0
Bull breeding soundness evaluation	20	2	10.0
Vaccinations	20	18	90.0
Deworming	20	16	80.0
Lice/warble treatment	20	18	90.0
Fly control	20	15	75.0
Postmortem examination	20	15	75.0
Vitamin E-Se injection	20	19	95.0
Growth promotants	20	3	15.0
Early dehorning	20	10	50.0
Polled	20	3	15.0
Early castration	20	13	65.0
Creep feeding	20	4	20.0

Table 2. Averages and Location of Measures of Herd Performance, Algoma District, Ontario Red Meat II Herd Health Option, in 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
Number									
Heifers	14	20	7.0	6.8	16.0	13.0	4.5	1.0	0.0
Cows	16	88	42.1	19.0	61.0	55.0	38.5	30.0	15.0
Bulls	16	3	1.6	0.9	3.0	2.0	2.0	1.0	0.0
Exposed to Mating	20	121	48.4	24.0	76.5	60.5	43.0	35.0	23.0
Calves Weaned	20	96	40.6	18.3	62.0	51.0	35.5	30.0	22.5
Length of Calving Season									
Calving Spread (days)	20	350	125.4	89.1	296.5	129.5	93.5	71.5	58.0
Breeding Success / Removals									
Open Rate	20	11	3.7	3.4	8.5	6.0	3.5	0.0	0.0
Removed Rate	20	37	17.1	11.1	32.5	25.0	17.5	6.0	5.0
Calving Success									
Calving Rate	20	116	95.1	9.3	105.0	100.0	96.0	92.0	80.0
Liveborn Calving Rate	20	107	90.0	8.8	101.0	95.0	92.0	84.5	77.0
Stillborn Rate	20	16	5.5	4.7	13.0	8.0	5.0	2.5	0.0
Assisted Calving Rate	20	31	8.3	8.0	20.0	10.5	5.5	3.0	1.0
Calf Survival and Treatment									
Calf Mortality Rate	17	27	5.5	6.7	14.0	7.0	3.0	2.0	0.0
Calf Treatment Rate	19	56	18.2	20.2	54.0	33.0	11.0	1.0	0.0
Productivity									
Weaned Calf Crop Rate	20	111	86.5	10.7	99.5	91.5	87.5	79.5	75.0
Average 200 Day Adjusted Weaning Weight (lbs)	20	608	549.2	49.9	599.0	588.0	565.0	521.0	482.5
Weight (lbs) Calf Weaned per Cow Exposed	20	603	473.9	58.9	551.5	519.5	474.5	436.0	398.5

NUMBER = number of herds (groups)
MAX = maximum (largest) observation
AVERAGE = mean
STD = standard deviation
PCTL90 = 90th percentile, PCTL75 = 75th percentile, MEDIAN = 50th percentile,
PCTL25 = 25th percentile, PCTL10 = 10th percentile
all rates are expressed as percentages

Table 3. Herd Management Practices Used by **Brant County** Producers in the Ontario Red Meat II Herd Health Option, in 1989

Management Practice	Number Herds	Number Yes	Percent Yes
Feed analysis	8	1	12.5
Ration formulation	8	2	25.0
Pasture improvement/rotation	8	7	87.5
Pregnancy examinations	8	8	100.0
Crossbreeding	8	6	75.0
Bull breeding soundness evaluation	8	3	37.5
Vaccinations	8	7	87.5
Deworming	8	8	100.0
Lice/warble treatment	8	8	100.0
Fly control	8	8	100.0
Postmortem examination	8	3	37.5
Vitamin E-Se injection	8	7	87.5
Growth promotants	8	2	25.0
Early dehorning	8	4	50.0
Polled	8	1	12.5
Early castration	8	5	62.5
Creep feeding	8	8	100.0

Table 4. Averages and Location of Measures of Herd Performance, **Brant** County, Ontario Red Meat II Herd Health Option, in 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
Number									
Heifers	8	104	21.3	33.8	104.0	16.5	9.0	6.0	3.0
Cows	8	182	56.5	52.6	182.0	54.0	45.0	26.0	20.0
Bulls	8	14	2.9	4.5	14.0	2.0	1.5	1.0	0.0
Exposed to Mating	7	207	67.6	65.4	207.0	86.0	50.0	22.0	20.0
Calves Weaned	7	146	50.7	44.8	146.0	57.0	46.0	20.0	18.0
Length of Calving Season									
Calving Spread (days)	7	332	146.1	106.4	332.0	219.0	127.0	54.0	40.0
Breeding Success / Removals									
Open Rate	7	17	7.3	5.0	17.0	10.0	5.0	4.0	2.0
Removed Rate	7	31	15.4	8.5	31.0	20.0	12.0	10.0	5.0
Calving Success									
Calving Rate	7	96	85.6	12.2	96.0	95.0	92.0	78.0	64.0
Liveborn Calving Rate	7	94	82.3	12.5	94.0	91.0	88.0	77.0	58.0
Stillborn Rate	7	6	3.6	2.1	6.0	5.0	5.0	1.0	1.0
Assisted Calving Rate	7	21	8.7	7.4	21.0	15.0	6.0	3.0	0.0
Calf Survival and Treatment									
Calf Mortality Rate	7	15	3.4	6.1	15.0	9.0	0.0	0.0	0.0
Calf Treatment Rate	6	34	11.7	12.5	34.0	13.0	11.5	0.0	0.0
Productivity									
Weaned Calf Crop Rate	7	94	79.7	14.4	94.0	91.0	88.0	66.0	58.0
Average 200 Day Adjusted Weaning Weight (lbs)	7	690	570.9	68.3	690.0	617.0	562.0	534.0	473.0
Weight (lbs) Calf Weaned per Cow Exposed	7	649	458.9	117.6	649.0	561.0	426.0	362.0	312.0

NUMBER = number of herds (groups)
MAX = maximum (largest) observation
AVERAGE = mean
STD = standard deviation
PCTL90 = 90th percentile, PCTL75 = 75th percentile, MEDIAN = 50th percentile,
PCTL25 = 25th percentile, PCTL10 = 10th percentile
all rates are expressed as percentages

Table 5. Herd Management Practices Used by **Bruce County** Producers in the Ontario Red Meat II Herd Health Option, in 1989

Management Practice	Number Herds	Number Yes	Percent Yes
Feed analysis	140	29	20.7
Ration formulation	140	27	19.3
Pasture improvement/rotation	140	115	82.1
Pregnancy examinations	140	118	84.3
Crossbreeding	140	119	85.0
Bull breeding soundness evaluation	140	48	34.3
Vaccinations	140	116	82.9
Deworming	140	110	78.6
Lice/warble treatment	140	134	95.7
Fly control	140	101	72.1
Postmortem examination	140	83	59.3
Vitamin E-Se injection	140	133	95.0
Growth promotants	140	32	22.9
Early dehorning	140	74	52.9
Polled	140	5	3.6
Early castration	140	86	61.4
Creep feeding	140	76	54.3

Table 6. Averages and Location of Measures of Herd Performance, Bruce County, Ontario Red Meat II Herd Health Option, in 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
Number									
Heifers	133	40	7.5	8.6	18.0	10.0	5.0	1.0	0.0
Cows	135	427	49.9	46.9	96.0	60.0	40.0	23.0	15.0
Bulls	134	20	2.0	2.2	4.0	2.0	1.0	1.0	1.0
Exposed to Mating	140	457	55.5	51.8	109.0	64.5	43.0	25.0	16.5
Calves Weaned	139	427	49.1	46.2	98.0	56.0	38.0	22.0	14.0
Length of Calving Season									
Calving Spread (days)	139	364	126.1	73.1	223.0	157.0	103.0	77.0	54.0
Breeding Success / Removals									
Open Rate	140	30	3.9	4.7	10.0	6.0	3.0	0.0	0.0
Removed Rate	139	40	12.4	8.8	27.0	17.0	11.0	6.0	2.0
Calving Success									
Calving Rate	140	114	95.9	6.6	101.0	100.0	98.0	92.0	88.0
Liveborn Calving Rate	140	108	92.3	7.9	100.0	98.0	94.0	88.0	81.5
Stillborn Rate	140	27	3.9	5.1	10.0	5.0	2.0	0.0	0.0
Assisted Calving Rate	140	100	11.5	12.9	22.0	15.0	9.0	4.0	0.0
Calf Survival and Treatment									
Calf Mortality Rate	135	31	3.7	5.3	10.0	6.0	1.0	0.0	0.0
Calf Treatment Rate	137	93	15.1	15.9	34.0	21.0	10.0	4.0	0.0
Productivity									
Weaned Calf Crop Rate	139	107	89.1	9.0	100.0	96.0	90.0	84.0	76.0
Average 200 Day Adjusted Weaning Weight (lbs)	133	710	517.8	66.3	596.0	563.0	512.0	470.0	435.0
Weight (lbs) Calf Weaned per Cow Exposed	133	703	461.0	74.3	542.0	512.0	461.0	409.0	368.0

NUMBER = number of herds (groups)
MAX = maximum (largest) observation
AVERAGE = mean
STD = standard deviation
PCTL90 = 90th percentile, PCTL75 = 75th percentile, MEDIAN = 50th percentile,
PCTL25 = 25th percentile, PCTL10 = 10th percentile
all rates are expressed as percentages

Table 7. Herd Management Practices Used by **Cochrane District** Producers in the Ontario Red Meat II Herd Health Option in 1989

Management Practice	Number Herds	Number Yes	Percent Yes
Feed analysis	15	3	20.0
Ration formulation	15	13	86.7
Pasture improvement/rotation	15	14	93.3
Pregnancy examinations	15	7	46.7
Crossbreeding	15	12	80.0
Bull breeding soundness evaluation	15	5	33.3
Vaccinations	15	15	100.0
Deworming	15	13	86.7
Lice/warble treatment	15	13	86.7
Fly control	15	5	33.3
Postmortem examination	15	2	13.3
Vitamin E-Se injection	15	14	93.3
Growth promotants	15	4	26.7
Early dehorning	15	12	80.0
Polled	15	1	6.7
Early castration	15	13	86.7
Creep feeding	15	9	40.0

Table 8. Averages and Location of Measures of Herd Performance, Cochrane District, Ontario Red Meat II Herd Health Option, in 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
Number									
Heifers	15	30	11.5	9.1	21.0	18.0	9.0	2.0	0.0
Cows	15	106	52.1	23.0	71.0	68.0	57.0	33.0	24.0
Bulls	15	4	2.1	0.9	3.0	3.0	2.0	1.0	1.0
Exposed to Mating	15	123	62.3	27.9	110.0	72.0	57.0	42.0	24.0
Calves Weaned	15	103	51.8	22.8	79.0	66.0	46.0	35.0	23.0
Length of Calving Season									
Calving Spread (days)	15	195	97.1	39.4	155.0	110.0	92.0	71.0	61.0
Breeding Success / Removals									
Open Rate	15	11	4.4	3.9	10.0	8.0	4.0	1.0	0.0
Removed Rate	15	30	16.4	7.4	25.0	21.0	17.0	12.0	6.0
Calving Success									
Calving Rate	15	100	90.9	8.1	100.0	97.0	93.0	82.0	78.0
Liveborn Calving Rate	15	100	88.3	8.9	100.0	94.0	90.0	79.0	74.0
Stillborn Rate	15	13	3.1	3.6	9.0	4.0	3.0	0.0	0.0
Assisted Calving Rate	15	24	9.6	7.6	21.0	17.0	8.0	4.0	0.0
Calf Survival and Treatment									
Calf Mortality Rate	15	14	4.3	4.4	10.0	9.0	3.0	0.0	0.0
Calf Treatment Rate	15	100	35.8	37.8	100.0	60.0	19.0	3.0	0.0
Productivity									
Weaned Calf Crop Rate	15	100	84.4	9.6	96.0	92.0	85.0	76.0	72.0
Average 200 Day Adjusted Weaning Weight (lbs)	15	622	560.3	40.5	616.0	600.0	553.0	526.0	514.0
Weight (lbs) Calf Weaned per Cow Exposed	15	578	473.5	71.0	575.0	531.0	490.0	411.0	378.0

NUMBER = number of herds (groups)
MAX = maximum (largest) observation
AVERAGE = mean
STD = standard deviation
PCTL90 = 90th percentile, PCTL75 = 75th percentile, MEDIAN = 50th percentile,
PCTL25 = 25th percentile, PCTL10 = 10th percentile
all rates are expressed as percentages

Table 9. Herd Management Practices Used by **Dufferin County** Producers in the Ontario Red Meat II Herd Health Option, in 1989

Management Practice	Number Herds	Number Yes	Percent Yes
Feed analysis	23	9	39.1
Ration formulation	23	3	13.0
Pasture improvement/rotation	23	22	95.7
Pregnancy examinations	23	16	69.6
Crossbreeding	23	16	69.6
Bull breeding soundness evaluation	23	4	17.4
Vaccinations	23	16	69.6
Deworming	23	19	82.6
Lice/warble treatment	23	23	100.0
Fly control	23	18	78.3
Postmortem examination	23	7	30.4
Vitamin E-Se injection	23	22	95.7
Growth promotants	23	6	26.1
Early dehorning	23	9	39.1
Polled	23	4	17.4
Early castration	23	16	69.6
Creep feeding	23	8	34.8

Table 10. Averages and Location of Measures of Herd Performance, Dufferin County, Ontario Red Meat II Herd Health Option, in 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
Number									
Heifers	20	27	7.6	6.7	16.0	11.0	6.0	2.0	0.0
Cows	23	94	40.3	23.5	77.0	56.0	33.0	24.0	15.0
Bulls	22	4	1.3	0.9	2.0	2.0	1.0	1.0	0.0
Exposed to Mating	23	128	45.3	30.6	93.0	69.0	35.0	22.0	19.0
Calves Weaned	23	80	37.5	22.2	74.0	52.0	33.0	19.0	15.0
Length of Calving Season									
Calving Spread (days)	21	300	113.6	67.6	210.0	114.0	91.0	71.0	67.0
Breeding Success / Removals									
Open Rate	23	23	3.6	5.3	9.0	6.0	1.0	0.0	0.0
Removed Rate	23	33	14.4	9.3	24.0	21.0	14.0	7.0	5.0
Calving Success									
Calving Rate	23	105	92.0	13.0	103.0	100.0	97.0	83.0	77.0
Liveborn Calving Rate	23	100	88.3	12.2	100.0	97.0	93.0	80.0	77.0
Stillborn Rate	23	21	3.8	4.8	8.0	6.0	4.0	0.0	0.0
Assisted Calving Rate	23	42	11.1	11.3	22.0	16.0	8.0	4.0	1.0
Calf Survival and Treatment									
Calf Mortality Rate	22	21	5.5	6.7	15.0	10.0	2.5	0.0	0.0
Calf Treatment Rate	22	100	19.5	23.5	46.0	25.0	12.5	2.0	0.0
Productivity									
Weaned Calf Crop Rate	23	100	85.4	10.1	96.0	94.0	86.0	79.0	74.0
Average 200 Day Adjusted Weaning Weight (lbs)	23	623	536.5	63.9	608.0	584.0	551.0	504.0	436.0
Weight (lbs) Calf Weaned per Cow Exposed	23	577	456.9	66.9	528.0	513.0	458.0	421.0	363.0

NUMBER = number of herds (groups)
MAX = maximum (largest) observation
AVERAGE = mean
STD = standard deviation
PCTL90 = 90th percentile, PCTL75 = 75th percentile, MEDIAN = 50th percentile,
PCTL25 = 25th percentile, PCTL10 = 10th percentile
all rates are expressed as percentages

Table 11. Herd Management Practices Used by **Dundas County** Producers in the Ontario Red Meat II Herd Health Option, in 1989

Management Practice	Number Herds	Number Yes	Percent Yes
Feed analysis	6	3	50.0
Ration formulation	6	3	50.0
Pasture improvement/rotation	6	6	100.0
Pregnancy examinations	6	5	83.3
Crossbreeding	6	3	50.0
Bull breeding soundness evaluation	6	2	33.3
Vaccinations	6	6	100.0
Deworming	6	6	100.0
Lice/warble treatment	6	6	100.0
Fly control	6	6	100.0
Postmortem examination	6	4	66.7
Vitamin E-Se injection	6	6	100.0
Growth promotants	6	2	33.3
Early dehorning	6	5	83.3
Polled	6	1	16.7
Early castration	6	3	50.0
Creep feeding	6	3	50.0

Table 12. Averages and Location of Measures of Herd Performance, **Dundas** County, Ontario Red Meat II Herd Health Option, in 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
Number									
Heifers	3	14	7.0	6.2	14.0	14.0	5.0	2.0	2.0
Cows	4	30	19.5	7.3	30.0	24.5	17.0	14.5	14.0
Bulls	4	2	1.5	0.6	2.0	2.0	1.5	1.0	1.0
Exposed to Mating	6	68	30.0	20.1	68.0	36.0	22.5	17.0	14.0
Calves Weaned	6	41	23.5	11.7	41.0	33.0	21.5	14.0	10.0
Length of Calving Season									
Calving Spread (days)	6	215	147.0	63.7	215.0	202.0	154.0	95.0	62.0
Breeding Success / Removals									
Open Rate	6	14	2.8	5.6	14.0	3.0	0.0	0.0	0.0
Removed Rate	6	32	24.8	6.1	32.0	29.0	26.5	18.0	17.0
Calving Success									
Calving Rate	6	103	93.3	12.5	103.0	100.0	100.0	86.0	71.0
Liveborn Calving Rate	6	100	89.7	10.2	100.0	95.0	93.0	86.0	71.0
Stillborn Rate	6	11	3.7	4.5	11.0	6.0	2.5	0.0	0.0
Assisted Calving Rate	6	33	14.0	10.8	33.0	20.0	10.5	6.0	4.0
Calf Survival and Treatment									
Calf Mortality Rate	6	17	8.0	7.6	17.0	15.0	8.0	0.0	0.0
Calf Treatment Rate	6	100	47.7	42.5	100.0	100.0	33.5	16.0	3.0
Productivity									
Weaned Calf Crop Rate	6	96	82.7	14.6	96.0	95.0	87.0	71.0	60.0
Average 200 Day Adjusted Weaning Weight (lbs)	6	705	594.2	76.9	705.0	679.0	552.5	539.0	537.0
Weight (lbs) Calf Weaned per Cow Exposed	6	581	489.7	88.0	581.0	543.0	502.0	485.0	325.0

NUMBER = number of herds (groups)
MAX = maximum (largest) observation
average = mean
STD = standard deviation
PCTL90 = 90th percentile, PCTL75 = 75th percentile, MEDIAN = 50th percentile,
PCTL25 = 25th percentile, PCTL10 = 10th percentile
all rates are expressed as percentages

2Table 13. Herd Management Practices Used by **Durham East County** Producers in the Ontario Red Meat II Herd Health Option, in 1989

Management Practice	Number Herds	Number Yes	Percent Yes
Feed analysis	12	5	41.7
Ration formulation	12	4	33.3
Pasture improvement/rotation	12	10	83.3
Pregnancy examinations	12	7	63.6
Crossbreeding	12	9	75.0
Bull breeding soundness evaluation	12	4	33.3
Vaccinations	12	9	75.0
Deworming	12	10	83.3
Lice/warble treatment	12	12	100.0
Fly control	12	9	75.0
Postmortem examination	12	6	50.0
Vitamin E-Se injection	12	11	91.7
Growth promotants	12	3	25.0
Early dehorning	12	8	66.7
Polled	12	1	8.3
Early castration	12	9	75.0
Creep feeding	12	11	91.7

Table 14. Averages and Location of Measures of Herd Performance, **Durham East County**, Ontario Red Meat II Herd Health Option, in 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
Number									
Heifers	12	15	4.3	4.2	6.0	6.0	4.5	0.5	0.0
Cows	12	159	53.2	43.0	120.0	52.0	42.5	24.5	18.0
Bulls	12	12	2.2	3.3	5.0	2.0	1.0	1.0	0.0
Exposed to Mating	11	174	56.1	50.9	130.0	64.0	45.0	18.0	18.0
Calves Weaned	12	145	50.0	42.2	124.0	51.0	41.5	18.0	13.0
Length of Calving Season									
Calving Spread (days)	9	278	129.8	79.6	278.0	162.0	114.0	85.0	33.0
Breeding Success / Removals									
Open Rate	10	11	2.9	3.7	8.5	5.0	1.5	0.0	0.0
Removed Rate	9	28	9.1	9.5	28.0	11.0	9.0	0.0	0.0
Calving Success									
Calving Rate	10	100	97.6	2.7	100.0	100.0	98.5	95.0	94.0
Liveborn Calving Rate	10	100	93.5	6.5	100.0	100.0	93.5	92.0	84.0
Stillborn Rate	10	19	4.4	5.8	13.0	7.0	3.0	0.0	0.0
Assisted Calving Rate	10	20	8.0	6.1	16.5	12.0	7.5	5.0	0.0
Calf Survival and Treatment									
Calf Mortality Rate	10	9	2.8	3.7	8.0	7.0	0.0	0.0	0.0
Calf Treatment Rate	10	32	10.9	10.7	27.0	18.0	8.5	0.0	0.0
Productivity									
Weaned Calf Crop Rate	11	100	91.5	8.7	100.0	100.0	93.0	87.0	83.0
Average 200 Day Adjusted Weaning Weight (lbs)	11	708	556.2	80.1	606.0	606.0	584.0	482.0	465.0
Weight (lbs) Calf Weaned per Cow Exposed	10	614	509.3	77.4	610.0	591.0	501.5	438.0	413.0

NUMBER = number of herds (groups)
MAX = maximum (largest) observation
AVERAGE = mean
STD = standard deviation
PCTL90 = 90th percentile, PCTL75 = 75th percentile, MEDIAN = 50th percentile,
PCTL25 = 25th percentile, PCTL10 = 10th percentile
all rates are expressed as percentages

Table 15. Herd Management Practices Used by **Durham West County** Producers in the Ontario Red Meat II Herd Health Option, in 1989

Management Practice	Number Herds	Number Yes	Percent Yes
Feed analysis	21	5	23.8
Ration formulation	21	5	23.8
Pasture improvement/rotation	21	19	90.5
Pregnancy examinations	21	15	71.4
Crossbreeding	21	15	71.4
Bull breeding soundness evaluation	21	5	23.8
Vaccinations	21	18	85.7
Deworming	21	19	90.5
Lice/warble treatment	21	21	100.0
Fly control	21	17	81.0
Postmortem examination	21	7	33.3
Vitamin E-Se injection	21	20	95.2
Growth promotants	21	4	19.0
Early dehorning	21	14	66.7
Polled	21	3	14.3
Early castration	21	15	71.4
Creep feeding	21	14	66.7

Table 16. Averages and Location of Measures of Herd Performance, **Durham West County**, Ontario Red Meat II Herd Health Option, in 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
Number									
Heifers	20	77	11.6	18.2	34.0	10.0	6.0	3.0	0.0
Cows	21	267	62.9	67.4	141.0	16.0	35.0	22.0	12.0
Bulls	20	22	3.4	4.9	7.5	4.5	2.0	1.0	0.5
Exposed to Mating	21	351	70.5	79.8	163.0	63.0	40.0	25.0	19.0
Calves Weaned	21	294	60.4	68.2	154.0	57.0	28.0	23.0	18.0
Length of Calving Season									
Calving Spread (days)	21	352	158.8	106.3	311.0	274.0	119.0	76.0	50.0
Breeding Success / Removals									
Open Rate	21	13	5.6	3.9	11.0	8.0	5.0	3.0	0.0
Removed Rate	21	47	16.9	13.1	36.0	20.0	13.0	8.0	5.0
Calving Success									
Calving Rate	21	117	96.7	9.1	105.0	100.0	99.0	93.0	88.0
Liveborn Calving Rate	21	108	92.8	8.3	100.0	98.0	93.0	90.0	87.0
Stillborn Rate	21	9	4.0	2.8	8.0	6.0	4.0	2.0	0.0
Assisted Calving Rate	21	27	7.1	8.2	18.0	10.0	4.0	0.0	0.0
Calf Survival and Treatment									
Calf Mortality Rate	21	32	7.0	8.6	20.0	8.0	4.0	0.0	0.0
Calf Treatment Rate	21	100	18.0	28.3	31.0	16.0	11.0	4.0	0.0
Productivity									
Weaned Calf Crop Rate	21	100	86.3	10.7	96.0	94.0	88.0	83.0	71.0
Average 200 Day Adjusted Weaning Weight (lbs)	21	655	537.3	62.2	608.0	565.0	545.0	492.0	476.0
Weight (lbs) Calf Weaned per Cow Exposed	21	607	464.3	83.6	565.0	514.0	475.0	400.0	339.0

NUMBER = number of herds (groups)
MAX = maximum (largest) observation
AVERAGE = mean
STD = standard deviation
PCTL90 = 90th percentile, PCTL75 = 75th percentile, MEDIAN = 50th percentile,
PCTL25 = 25th percentile, PCTL10 = 10th percentile
all rates are expressed as percentages

Table 17. Herd Management Practices Used by **Elgin County** Producers in the Ontario Red Meat II Herd Health Option, in 1989

Management Practice	Number Herds	Number Yes	Percent Yes
Feed analysis	25	13	52.0
Ration formulation	25	12	48.0
Pasture improvement/rotation	25	17	68.0
Pregnancy examinations	25	18	72.0
Crossbreeding	25	19	76.0
Bull breeding soundness evaluation	25	6	24.0
Vaccinations	25	18	72.0
Deworming	25	24	96.0
Lice/warble treatment	25	25	100.0
Fly control	25	22	88.0
Postmortem examination	25	12	48.0
Vitamin E-Se injection	25	20	80.0
Growth promotants	25	11	44.0
Early dehorning	25	15	60.0
Polled	25	3	12.0
Early castration	25	18	72.0
Creep feeding	25	15	60.0

Table 18. Averages and Location of Measures of Herd Performance, Elgin County, Ontario Red Meat II Herd Health Option, in 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
Number									
Heifers	24	29	8.5	6.2	17.0	10.5	8.0	4.0	2.0
Cows	24	112	38.6	27.4	73.0	46.0	34.0	19.0	12.0
Bulls	24	9	2.0	2.1	4.0	3.0	1.0	1.0	0.0
Exposed to Mating	25	132	40.8	30.1	75.0	47.0	34.0	20.0	12.0
Calves Weaned	25	120	37.0	27.4	74.0	38.0	30.0	18.0	12.0
Length of Calving Season									
Calving Spread (days)	21	347	151.2	81.8	249.0	199.0	151.0	84.0	56.0
Breeding Success / Removals									
Open Rate	25	29	6.3	9.0	18.0	11.0	0.0	0.0	0.0
Removed Rate	24	51	11.3	11.9	27.0	15.5	8.0	2.0	0.0
Calving Success									
Calving Rate	25	118	95.0	8.9	100.0	100.0	98.0	89.0	83.0
Liveborn Calving Rate	25	112	92.6	9.0	100.0	100.0	94.0	89.0	76.0
Stillborn Rate	25	11	2.6	3.3	8.0	4.0	1.0	0.0	0.0
Assisted Calving Rate	25	26	8.7	7.9	20.0	14.0	8.0	2.0	0.0
Calf Survival and Treatment									
Calf Mortality Rate	23	23	2.7	5.3	8.0	3.0	0.0	0.0	0.0
Calf Treatment Rate	24	48	12.9	12.4	24.0	16.5	11.0	4.0	0.0
Productivity									
Weaned Calf Crop Rate	25	140	92.5	13.9	106.0	97.0	92.0	86.0	74.0
Average 200 Day Adjusted Weaning Weight (lbs)	25	622	515.0	71.2	600.0	570.0	509.0	485.0	400.0
Weight (lbs) Calf Weaned per Cow Exposed	25	833	480.8	120.5	659.0	536.0	455.0	400.0	364.0

NUMBER = number of herds (groups)
MAX = maximum (largest) observation
AVERAGE = mean
STD = standard deviation
PCTL90 = 90th percentile, PCTL75 = 75th percentile, MEDIAN = 50th percentile,
PCTL25 = 25th percentile, PCTL10 = 10th percentile
all rates are expressed as percentages

Table 19. Herd Management Practices Used by **Essex County** Producers in the Ontario Red Meat II Herd Health Option, in 1990

Management Practice	Number Herds	Number Yes	Percent Yes
Feed analysis	3	1	33.3
Ration formulation	3	0	0.0
Pasture improvement/rotation	3	2	66.7
Pregnancy examinations	3	1	33.3
Crossbreeding	3	3	100.0
Bull breeding soundness evaluation	3	0	0.0
Vaccinations	3	1	33.3
Deworming	3	2	66.7
Lice/warble treatment	3	2	66.7
Fly control	3	2	66.7
Postmortem examination	3	2	66.7
Vitamin E-Se injection	3	1	33.3
Growth promotants	3	2	66.7
Early dehorning	3	2	66.7
Polled	3	0	0.0
Early castration	3	2	66.7
Creep feeding	3	3	100.0

Table 20. Averages and Location of Measures of Herd Performance, **Essex** **County**, Ontario Red Meat II Herd Health Option, in 1990

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
Number									
Heifers	3	2	0.7	1.2	2.0	2.0	0.0	0.0	0.0
Cows	3	20	11.0	10.1	20.0	20.0	13.0	0.0	0.0
Bulls	3	1	0.7	0.6	1.0	1.0	1.0	0.0	0.0
Exposed to Mating	3	18	15.7	2.5	18.0	18.0	16.0	13.0	13.0
Calves Weaned	3	13	10.7	2.5	13.0	13.0	11.0	8.0	8.0
Length of Calving Season									
Calving Spread (days)	3	261	157.3	91.3	261.0	261.0	122.0	89.0	89.0
Breeding Success / Removals									
Open Rate	2	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Removed Rate	2	25	12.5	17.7	25.0	25.0	12.5	0.0	0.0
Calving Success									
Calving Rate	2	108	94.5	19.1	108.0	108.0	94.5	81.0	81.0
Liveborn Calving Rate	3	100	91.0	9.5	100.0	100.0	92.0	81.0	81.0
Stillborn Rate	2	15	7.5	10.6	15.0	15.0	7.5	0.0	0.0
Assisted Calving Rate	3	25	12.3	12.5	25.0	25.0	12.0	0.0	0.0
Calf Survival and Treatment									
Calf Mortality Rate	3	56	21.3	30.3	56.0	56.0	8.0	0.0	0.0
Calf Treatment Rate	3	17	8.3	8.5	17.0	17.0	8.0	0.0	0.0
Productivity									
Weaned Calf Crop Rate	3	85	70.0	22.6	85.0	85.0	81.0	44.0	44.0
Average 200 Day Adjusted Weaning Weight (lbs)	3	567	534.0	31.6	567.0	567.0	531.0	504.0	504.0
Weight (lbs) Calf Weaned per Cow Exposed	3	449	370.3	104.3	449.0	449.0	410.0	252.0	252.0

NUMBER = number of herds (groups)
MAX = maximum (largest) observation
AVERAGE = mean
STD = standard deviation
PCTL90 = 90th percentile, PCTL75 = 75th percentile, MEDIAN = 50th percentile,
PCTL25 = 25th percentile, PCTL10 = 10th percentile
all rates are expressed as percentages

Table 21. Herd Management Practices Used by Frontenac County Producers in the Ontario Red Meat II Herd Health Option, in 1989

Management Practice	Number Herds	Number Yes	Percent Yes
Feed analysis	24	6	25.0
Ration formulation	24	3	12.5
Pasture improvement/rotation	24	17	70.8
Pregnancy examinations	24	16	66.7
Crossbreeding	24	16	66.7
Bull breeding soundness evaluation	24	8	33.3
Vaccinations	24	20	83.3
Deworming	24	20	83.3
Lice/warble treatment	24	22	91.7
Fly control	24	19	79.2
Postmortem examination	24	13	54.2
Vitamin E-Se injection	24	17	70.8
Growth promotants	24	4	16.7
Early dehorning	24	12	50.0
Polled	24	4	16.7
Early castration	24	17	70.8
Creep feeding	24	9	37.5

Table 22. Averages and Location of Measures of Herd Performance, **Frontenac County**, Ontario Red Meat II Herd Health Option, in 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
Number									
Heifers	22	35	9.1	9.9	23.0	10.0	6.0	3.0	0.0
Cows	23	209	36.7	41.9	61.0	40.0	24.0	17.0	12.0
Bulls	22	8	2.1	2.2	6.0	3.0	1.0	1.0	0.0
Exposed to Mating	23	244	43.0	49.5	92.0	50.0	26.0	19.0	14.0
Calves Weaned	23	232	38.5	47.1	82.0	41.0	24.0	14.0	12.0
Length of Calving Season									
Calving Spread (days)	23	315	149.4	84.3	297.0	229.0	122.0	86.0	56.0
Breeding Success / Removals									
Open Rate	23	32	4.3	6.9	9.0	7.0	2.0	0.0	0.0
Removed Rate	23	42	13.1	12.0	35.0	20.0	11.0	4.0	0.0
Calving Success									
Calving Rate	23	104	94.6	8.7	100.0	100.0	98.0	92.0	84.0
Liveborn Calving Rate	23	104	92.3	9.5	100.0	100.0	94.0	88.0	79.0
Stillborn Rate	23	13	2.5	3.5	7.0	4.0	0.0	0.0	0.0
Assisted Calving Rate	23	36	12.9	9.6	29.0	17.0	12.0	6.0	2.0
Calf Survival and Treatment									
Calf Mortality Rate	23	22	4.2	6.7	14.0	8.0	0.0	0.0	0.0
Calf Treatment Rate	23	100	25.5	34.8	93.0	37.0	11.0	2.0	0.0
Productivity									
Weaned Calf Crop Rate	23	104	88.6	12.0	100.0	100.0	90.0	83.0	71.0
Average 200 Day Adjusted Weaning Weight (lbs)	23	668	560.9	62.5	620.0	608.0	569.0	529.0	475.0
Weight (lbs) Calf Weaned per Cow Exposed	23	620	496.0	83.9	612.0	566.0	495.0	427.0	386.0

NUMBER = number of herds (groups)
MAX = maximum (largest) observation
AVERAGE = mean
STD = standard deviation
PCTL90 = 90th percentile, PCTL75 = 75th percentile, MEDIAN = 50th percentile,
PCTL25 = 25th percentile, PCTL10 = 10th percentile
all rates are expressed as percentages

Table 23. Herd Management Practices Used by **Glengarry County** Producers in the Ontario Red Meat II Herd Health Option, in 1989

Management Practice	Number Herds	Number Yes	Percent Yes
Feed analysis	16	10	62.2
Ration formulation	16	9	56.2
Pasture improvement/rotation	16	13	81.2
Pregnancy examinations	16	15	93.7
Crossbreeding	16	12	75.0
Bull breeding soundness evaluation	16	6	37.5
Vaccinations	16	15	93.7
Deworming	16	14	87.5
Lice/warble treatment	16	16	100.0
Fly control	16	10	62.5
Postmortem examination	16	2	12.5
Vitamin E-Se injection	16	15	93.7
Growth promotants	16	1	6.2
Early dehorning	16	9	56.2
Polled	16	3	18.8
Early castration	16	10	62.5
Creep feeding	16	9	56.2

Table 24. Averages and Location of Measures of Herd Performance, Glengarry County, Ontario Red Meat II Herd Health Option, in 1990

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
Number									
Heifers	16	10	4.8	2.8	9.0	7.0	4.0	3.0	2.0
Cows	16	60	22.2	13.5	37.0	27.5	17.0	11.5	11.0
Bulls	15	2	1.1	0.7	2.0	2.0	1.0	1.0	0.0
Exposed to Mating	16	60	23.6	13.9	44.0	29.5	19.0	14.0	11.0
Calves Weaned	16	45	19.9	10.4	38.0	25.5	18.0	11.0	10.0
Length of Calving Season									
Calving Spread (days)	16	342	113.7	74.2	219.0	124.0	88.0	80.0	52.0
Breeding Success / Removals									
Open Rate	16	29	3.5	7.4	9.0	3.0	0.0	0.0	0.0
Removed Rate	15	27	11.1	9.9	27.0	17.0	8.0	0.0	0.0
Calving Success									
Calving Rate	16	100	93.9	10.6	100.0	100.0	100.0	94.5	73.0
Liveborn Calving Rate	16	100	91.2	11.4	100.0	100.0	93.5	91.0	70.0
Stillborn Rate	16	10	3.1	3.4	7.0	6.0	2.0	0.0	0.0
Assisted Calving Rate	16	45	12.5	12.9	36.0	17.0	11.5	1.5	0.0
Calf Survival and Treatment									
Calf Mortality Rate	16	39	4.3	10.7	20.0	0.0	0.0	0.0	0.0
Calf Treatment Rate	16	100	29.9	36.7	100.0	38.5	14.0	5.5	0.0
Productivity									
Weaned Calf Crop Rate	16	100	87.9	16.9	100.0	100.0	93.5	82.5	60.0
Average 200 Day Adjusted Weaning Weight (lbs)	16	732	573.6	74.9	659.0	616.5	585.0	512.5	478.0
Weight (lbs) Calf Weaned per Cow Exposed	16	732	507.9	132.1	659.0	594.0	550.5	418.0	293.0

NUMBER = number of herds (groups)
MAX = maximum (largest) observation
AVERAGE = mean
STD = standard deviation
PCTL90 = 90th percentile, PCTL75 = 75th percentile, MEDIAN = 50th percentile,
PCTL25 = 25th percentile, PCTL10 = 10th percentile
all rates are expressed as percentages

Table 25. Herd Management Practices Used by Grenville County Producers in the Ontario Red Meat II Herd Health Option, in 1989

Management Practice	Number Herds	Number Yes	Percent Yes
Feed analysis	9	2	22.2
Ration formulation	9	2	22.2
Pasture improvement/rotation	9	6	66.7
Pregnancy examinations	9	9	100.0
Crossbreeding	9	5	55.6
Bull breeding soundness evaluation	9	4	44.4
Vaccinations	9	8	88.9
Deworming	9	7	77.8
Lice/warble treatment	9	8	88.9
Fly control	9	9	100.0
Postmortem examination	9	3	33.3
Vitamin E-Se injection	9	7	77.8
Growth promotants	9	0	0.0
Early dehorning	9	2	22.2
Polled	9	0	0.0
Early castration	9	3	33.3
Creep feeding	9	7	77.8

Table 26. Averages and Location of Measures of Herd Performance, Grenville County, Ontario Red Meat II Herd Health Option, in 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
Number									
Heifers	9	23	7.8	8.1	23.0	6.0	6.0	4.0	0.0
Cows	9	220	39.8	68.1	220.0	19.0	15.0	14.0	10.0
Bulls	9	9	2.1	3.2	9.0	1.0	1.0	0.0	0.0
Exposed to Mating	9	210	40.4	64.1	210.0	21.0	19.0	15.0	11.0
Calves Weaned	9	181	35.1	55.1	181.0	23.0	15.0	15.0	9.0
Length of Calving Season									
Calving Spread (days)	9	184	95.1	50.9	184.0	108.0	89.0	58.0	37.0
Breeding Success / Removals									
Open Rate	9	11	6.0	4.8	11.0	10.0	7.0	0.0	0.0
Removed Rate	9	33	15.8	8.8	33.0	18.0	16.0	14.0	0.0
Calving Success									
Calving Rate	9	100	92.8	5.8	100.0	100.0	91.0	89.0	84.0
Liveborn Calving Rate	9	100	90.6	5.0	100.0	92.0	90.0	89.0	84.0
Stillborn Rate	9	8	2.3	3.2	8.0	5.0	0.0	0.0	0.0
Assisted Calving Rate	9	33	15.7	13.7	33.0	30.0	14.0	3.0	0.0
Calf Survival and Treatment									
Calf Mortality Rate	8	17	5.5	5.9	17.0	8.0	5.5	0.0	0.0
Calf Treatment Rate	9	100	37.1	38.3	100.0	44.0	31.0	10.0	0.0
Productivity									
Weaned Calf Crop Rate	9	110	87.9	11.0	110.0	92.0	84.0	82.0	75.0
Average 200 Day Adjusted Weaning Weight (lbs)	9	675	554.4	84.5	675.0	613.0	574.0	476.0	423.0
Weight (lbs) Calf Weaned per Cow Exposed	9	660	488.8	105.7	660.0	531.0	506.0	389.0	365.0

NUMBER = number of herds (groups)
MAX = maximum (largest) observation
AVERAGE = mean
STD = standard deviation
PCTL90 = 90th percentile, PCTL75 = 75th percentile, MEDIAN = 50th percentile,
PCTL25 = 25th percentile, PCTL10 = 10th percentile
all rates are expressed as percentages

Table 27. Herd Management Practices Used by **Grey County** Producers in the Ontario Red Meat II Herd Health Option, in 1989

Management Practice	Number Herds	Number Yes	Percent Yes
Feed analysis	115	26	22.6
Ration formulation	115	22	19.1
Pasture improvement/rotation	115	100	87.0
Pregnancy examinations	115	94	81.7
Crossbreeding	115	64	55.7
Bull breeding soundness evaluation	115	35	30.4
Vaccinations	115	99	86.1
Deworming	115	91	79.1
Lice/warble treatment	115	107	93.0
Fly control	115	83	72.2
Postmortem examination	115	55	47.8
Vitamin E-Se injection	115	104	90.4
Growth promotants	115	24	20.9
Early dehorning	115	74	64.3
Polled	115	8	7.0
Early castration	115	73	63.5
Creep feeding	115	62	53.9

Table 28. Averages and Location of Measures of Herd Performance, Grey County, Ontario Red Meat II Herd Health Option, in 1989

Number	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
Heifers	108	62	7.5	8.2	16.0	10.0	5.0	2.0	0.0
Cows	112	251	43.9	33.5	81.0	54.0	34.0	23.5	15.0
Bulls	109	19	1.9	2.1	3.0	2.0	1.0	1.0	1.0
Exposed to Mating	105	162	47.8	31.6	89.0	55.0	40.0	26.0	18.0
Calves Weaned	107	261	43.8	34.2	78.0	50.0	34.0	23.0	16.0
Length of Calving Season									
Calving Spread (days)	104	364	143.9	70.9	239.0	171.0	133.5	89.5	69.0
Breeding Success / Removals									
Open Rate	105	19	3.6	4.0	9.0	6.0	3.0	0.0	0.0
Removed Rate	101	60	12.6	10.2	25.0	17.0	10.0	6.0	3.0
Calving Success									
Calving Rate	103	110	95.9	6.9	104.0	100.0	97.0	93.0	86.0
Liveborn Calving Rate	104	110	92.2	7.5	100.0	97.0	93.0	88.0	82.0
Stillborn Rate	103	23	4.1	4.1	9.0	6.0	3.0	0.0	0.0
Assisted Calving Rate	103	44	12.5	9.5	26.0	18.0	10.0	6.0	2.0
Calf Survival and Treatment									
Calf Mortality Rate	100	66	4.7	9.1	9.5	5.0	2.0	0.0	0.0
Calf Treatment Rate	101	100	18.4	20.2	43.0	23.0	14.0	5.0	0.0
Productivity									
Weaned Calf Crop Rate	104	114	88.0	11.5	100.0	94.0	90.0	84.0	76.0
Average 200 Day Adjusted Weaning Weight (lbs)	106	744	549.9	75.5	650.0	606.0	552.0	495.0	449.0
Weight (lbs) Calf Weaned per Cow Exposed	103	800	484.6	95.8	623.0	541.0	475.0	429.0	376.0

NUMBER = number of herds (groups)
MAX = maximum (largest) observation
AVERAGE = mean
STD = standard deviation
PCTL90 = 90th percentile, PCTL75 = 75th percentile, MEDIAN = 50th percentile,
PCTL25 = 25th percentile, PCTL10 = 10th percentile
all rates are expressed as percentages

Table 29. Herd Management Practices Used by **Haldimand & Norfolk County** Producers in the Ontario Red Meat II Herd Health Option, in 1989

Management Practice	Number Herds	Number Yes	Percent Yes
Feed analysis	11	3	27.3
Ration formulation	11	2	18.2
Pasture improvement/rotation	11	11	100.0
Pregnancy examinations	11	7	63.6
Crossbreeding	11	9	81.8
Bull breeding soundness evaluation	11	6	54.5
Vaccinations	11	5	45.5
Deworming	11	9	81.8
Lice/warble treatment	11	10	90.9
Fly control	11	8	72.7
Postmortem examination	11	4	36.4
Vitamin E-Se injection	11	11	100.0
Growth promotants	11	1	9.1
Early dehorning	11	7	63.6
Polled	11	0	0.0
Early castration	11	8	72.7
Creep feeding	11	9	81.8

Table 30. Averages and Location of Measures of Herd Performance, **Haldimand Norfolk County**, Ontario Red Meat II Herd Health Option, in 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
Number									
Heifers	11	30	11.9	9.8	28.0	16.0	8.0	3.0	2.0
Cows	11	70	35.9	17.1	50.0	43.0	40.0	16.0	16.0
Bulls	11	6	2.5	1.6	5.0	3.0	2.0	1.0	1.0
Exposed to Mating	11	105	41.4	24.5	54.0	46.0	42.0	24.0	16.0
Calves Weaned	11	100	39.3	24.9	54.0	54.0	38.0	17.0	15.0
Length of Calving Season									
Calving Spread (days)	11	275	119.4	70.3	185.0	148.0	126.0	56.0	38.0
Breeding Success / Removals									
Open Rate	11	14	3.6	4.9	12.0	5.0	2.0	0.0	0.0
Removed Rate	10	33	12.6	11.2	31.0	19.0	10.5	3.0	1.0
Calving Success									
Calving Rate	11	102	93.2	10.4	100.0	100.0	96.0	93.0	75.0
Liveborn Calving Rate	11	100	91.2	9.7	100.0	98.0	94.0	88.0	75.0
Stillborn Rate	11	7	2.1	2.5	6.0	4.0	2.0	0.0	0.0
Assisted Calving Rate	11	21	8.3	6.8	18.0	12.0	8.0	2.0	0.0
Calf Survival and Treatment									
Calf Mortality Rate	10	8	1.8	3.3	8.0	2.0	0.0	0.0	0.0
Calf Treatment Rate	11	132	28.2	37.1	50.0	28.0	15.0	8.0	7.0
Productivity									
Weaned Calf Crop Rate	11	129	92.4	15.3	100.0	100.0	93.0	85.0	75.0
Average 200 Day Adjusted Weaning Weight (lbs)	11	638	528.5	51.4	569.0	562.0	534.0	481.0	474.0
Weight (lbs) Calf Weaned per Cow Exposed	11	707	486.2	83.9	569.0	481.0	453.0	447.0	444.0

NUMBER = number of herds (groups)
MAX = maximum (largest) observation
AVERAGE = mean
STD = standard deviation
PCTL90 = 90th percentile, PCTL75 = 75th percentile, MEDIAN = 50th percentile,
PCTL25 = 25th percentile, PCTL10 = 10th percentile
all rates are expressed as percentages

Table 31. Herd Management Practices Used by **Haliburton District** Producers in the Ontario Red Meat II Herd Health Option, in 1989

Management Practice	Number Herds	Number Yes	Percent Yes
Feed analysis	0	0	0.0
Ration formulation	0	0	0.0
Pasture improvement/rotation	0	0	0.0
Pregnancy examinations	0	0	0.0
Crossbreeding	0	0	0.0
Bull breeding soundness evaluation	0	0	0.0
Vaccinations	0	0	0.0
Deworming	0	0	0.0
Lice/warble treatment	0	0	0.0
Fly control	0	0	0.0
Postmortem examination	0	0	0.0
Vitamin E-Se injection	0	0	0.0
Growth promotants	0	0	0.0
Early dehorning	0	0	0.0
Polled	0	0	0.0
Early castration	0	0	0.0
Creep feeding	0	0	0.0

Table 32. Averages and Location of Measures of Herd Performance, **Haliburton** District, Ontario Red Meat II Herd Health Option, in 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
Number									
Heifers	0	0	.	.	.	.	.	.	.
Cows	0	0	.	.	.	.	.	.	.
Bulls	0	0	.	.	.	.	.	.	.
Exposed to Mating	0	0	.	.	.	.	.	.	.
Calves Weaned	0	0	.	.	.	.	.	.	.
Length of Calving Season									
Calving Spread (days)	0	0	.	.	.	.	.	.	.
Breeding Success / Removals									
Open Rate	0	0	.	.	.	.	.	.	.
Removed Rate	0	0	.	.	.	.	.	.	.
Calving Success									
Calving Rate	0	0	.	.	.	.	.	.	.
Liveborn Calving Rate	0	0	.	.	.	.	.	.	.
Stillborn Rate	0	0	.	.	.	.	.	.	.
Assisted Calving Rate	0	0	.	.	.	.	.	.	.
Calf Survival and Treatment									
Calf Mortality Rate	0	0	.	.	.	.	.	.	.
Calf Treatment Rate	0	0	.	.	.	.	.	.	.
Productivity									
Weaned Calf Crop Rate	0	0	.	.	.	.	.	.	.
Average 200 Day Adjusted Weaning Weight (lbs)	0	0	.	.	.	.	.	.	.
Weight (lbs) Calf Weaned per Cow Exposed	0	0	.	.	.	.	.	.	.

NUMBER = number of herds (groups)
MAX = maximum (largest) observation
AVERAGE = mean
STD = standard deviation
PCTL90 = 90th percentile, PCTL75 = 75th percentile, MEDIAN = 50th percentile,
PCTL25 = 25th percentile, PCTL10 = 10th percentile
all rates are expressed as percentages

Table 33. Herd Management Practices Used by **Halton County** Producers in the Ontario Red Meat II Herd Health Option, in 1989

Management Practice	Number Herds	Number Yes	Percent Yes
Feed analysis	2	1	50.0
Ration formulation	2	1	50.0
Pasture improvement/rotation	2	2	100.0
Pregnancy examinations	2	2	100.0
Crossbreeding	2	2	100.0
Bull breeding soundness evaluation	2	1	50.0
Vaccinations	2	2	100.0
Deworming	2	1	50.0
Lice/warble treatment	2	2	100.0
Fly control	2	1	50.0
Postmortem examination	2	0	0.0
Vitamin E-Se injection	2	2	100.0
Growth promotants	2	0	0.0
Early dehorning	2	1	50.0
Polled	2	0	0.0
Early castration	2	1	50.0
Creep feeding	2	2	100.0

Table 34. Averages and Location of Measures of Herd Performance, Halton County, Ontario Red Meat II Herd Health Option, in 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
Number									
Heifers	2	5	4.0	1.4	5.0	5.0	4.0	3.0	3.0
Cows	2	36	30.0	8.5	36.0	36.0	30.0	24.0	24.0
Bulls	2	2	1.5	0.7	2.0	2.0	1.5	1.0	1.0
Exposed to Mating	2	24	23.5	0.7	24.0	24.0	23.5	23.0	23.0
Calves Weaned	2	23	22.5	0.7	23.0	23.0	22.5	22.0	22.0
Length of Calving Season									
Calving Spread (days)	2	67	60.0	9.9	67.0	67.0	60.0	53.0	53.0
Breeding Success / Removals									
Open Rate	2	4	4.0	0.0	4.0	4.0	4.0	4.0	4.0
Removed Rate	2	26	15.0	15.6	26.0	26.0	15.0	4.0	4.0
Calving Success									
Calving Rate	2	96	96.0	0.0	96.0	96.0	96.0	96.0	96.0
Liveborn Calving Rate	2	96	96.0	0.0	96.0	96.0	96.0	96.0	96.0
Stillborn Rate	2	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Assisted Calving Rate	2	9	9.0	0.0	9.0	9.0	9.0	9.0	9.0
Calf Survival and Treatment									
Calf Mortality Rate	2	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calf Treatment Rate	2	4	2.0	2.8	4.0	4.0	2.0	0.0	0.0
Productivity									
Weaned Calf Crop Rate	2	96	96.0	0.0	96.0	96.0	96.0	96.0	96.0
Average 200 Day Adjusted Weaning Weight (lbs)	2	617	576.0	57.9	617.0	617.0	576.0	535.0	535.0
Weight (lbs) Calf Weaned per Cow Exposed	2	590	551.5	54.4	590.0	590.0	551.5	513.0	513.0

NUMBER = number of herds (groups)
MAX = maximum (largest) observation
AVERAGE = mean
STD = standard deviation
PCTL90 = 90th percentile, PCTL75 = 75th percentile, MEDIAN = 50th percentile,
PCTL25 = 25th percentile, PCTL10 = 10th percentile
all rates are expressed as percentages

Table 35. Herd Management Practices Used by **Hamilton-Wentworth County** Producers in the Ontario Red Meat II Herd Health Option, in 1989

Management Practice	Number Herds	Number Yes	Percent Yes
Feed analysis	5	0	0.0
Ration formulation	5	0	0.0
Pasture improvement/rotation	5	4	80.0
Pregnancy examinations	5	3	60.0
Crossbreeding	5	3	60.0
Bull breeding soundness evaluation	5	1	20.0
Vaccinations	5	3	60.0
Deworming	5	5	100.0
Lice/warble treatment	5	4	80.0
Fly control	5	3	60.0
Postmortem examination	5	3	60.0
Vitamin E-Se injection	5	5	100.0
Growth promotants	5	0	0.0
Early dehorning	5	2	40.0
Polled	5	1	20.0
Early castration	5	4	80.0
Creep feeding	5	4	80.0

Table 36. Averages and Location of Measures of Herd Performance, **Hamilton-Wentworth County**, Ontario Red Meat II Herd Health Option, in 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
Number									
Heifers	5	31	14.2	10.3	31.0	16.0	12.0	7.0	5.0
Cows	5	63	38.6	21.2	63.0	58.0	34.0	23.0	15.0
Bulls	5	15	5.4	6.1	15.0	8.0	2.0	1.0	1.0
Exposed to Mating	5	71	42.8	26.2	71.0	70.0	34.0	24.0	15.0
Calves Weaned	5	56	28.8	17.9	56.0	35.0	26.0	17.0	10.0
Length of Calving Season									
Calving Spread (days)	5	314	247.6	77.9	314.0	304.0	260.0	241.0	119.0
Breeding Success / Removals									
Open Rate	5	31	14.4	10.2	31.0	15.0	13.0	9.0	4.0
Removed Rate	5	72	27.0	25.5	72.0	21.0	18.0	13.0	11.0
Calving Success									
Calving Rate	5	96	85.0	9.9	96.0	88.0	87.0	85.0	69.0
Liveborn Calving Rate	5	82	76.8	7.3	82.0	80.0	79.0	79.0	64.0
Stillborn Rate	5	17	8.8	5.3	17.0	10.0	8.0	6.0	3.0
Assisted Calving Rate	5	15	9.2	5.8	15.0	13.0	10.0	8.0	0.0
Calf Survival and Treatment									
Calf Mortality Rate	5	22	11.4	8.2	22.0	17.0	11.0	4.0	3.0
Calf Treatment Rate	5	100	32.8	38.6	100.0	26.0	19.0	17.0	2.0
Productivity									
Weaned Calf Crop Rate	5	79	68.6	11.4	79.0	76.0	71.0	67.0	50.0
Average 200 Day Adjusted Weaning Weight (lbs)	5	675	510.4	126.3	675.0	562.0	519.0	464.0	332.0
Weight (lbs) Calf Weaned per Cow Exposed	5	532	360.4	134.8	532.0	398.0	397.0	309.0	166.0

NUMBER = number of herds (groups)
MAX = maximum (largest) observation
AVERAGE = mean
STD = standard deviation
PCTL90 = 90th percentile, PCTL75 = 75th percentile, MEDIAN = 50th percentile,
PCTL25 = 25th percentile, PCTL10 = 10th percentile
all rates are expressed as percentages

Table 37. Herd Management Practices Used by **Hastings County** Producers in the Ontario Red Meat II Herd Health Option, in 1989

Management Practice	Number Herds	Number Yes	Percent Yes
Feed analysis	29	13	44.8
Ration formulation	29	12	41.4
Pasture improvement/rotation	29	22	75.9
Pregnancy examinations	29	23	79.3
Crossbreeding	29	23	79.3
Bull breeding soundness evaluation	29	8	27.6
Vaccinations	29	24	82.8
Deworming	29	22	75.9
Lice/warble treatment	29	24	82.8
Fly control	29	24	82.8
Postmortem examination	29	10	34.5
Vitamin E-Se injection	29	20	69.0
Growth promotants	29	7	24.1
Early dehorning	29	15	51.7
Polled	29	4	13.8
Early castration	29	19	65.5
Creep feeding	29	22	75.9

Table 38. Averages and Location of Measures of Herd Performance, Hastings County, Ontario Red Meat II Herd Health Option, 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
Number									
Heifers	28	26	6.7	6.7	17.0	8.5	5.0	2.0	0.0
Cows	29	81	35.9	21.0	71.0	50.0	30.0	18.0	14.0
Bulls	26	16	1.7	3.0	2.0	2.0	1.0	1.0	0.0
Exposed to Mating	29	78	38.0	21.1	76.0	50.0	31.0	21.0	14.0
Calves Weaned	29	76	34.4	20.1	72.0	44.0	27.0	19.0	13.0
Length of Calving Season									
Calving Spread (days)	29	350	131.3	86.1	263.0	149.0	90.0	85.0	57.0
Breeding Success / Removals									
Open Rate	29	18	3.7	4.6	9.0	7.0	2.0	0.0	0.0
Removed Rate	29	24	9.9	6.4	18.0	14.0	11.0	4.0	0.0
Calving Success									
Calving Rate	29	107	96.6	6.1	106.0	100.0	99.0	93.0	88.0
Liveborn Calving Rate	29	107	94.5	6.4	100.0	99.0	94.0	92.0	88.0
Stillborn Rate	29	12	2.2	3.2	6.0	4.0	0.0	0.0	0.0
Assisted Calving Rate	29	30	6.7	7.6	19.0	12.0	4.0	0.0	0.0
Calf Survival and Treatment									
Calf Mortality Rate	29	27	4.4	8.2	25.0	4.0	0.0	0.0	0.0
Calf Treatment Rate	29	100	16.4	26.7	45.0	21.0	5.0	0.0	0.0
Productivity									
Weaned Calf Crop Rate	29	107	90.2	9.1	100.0	96.0	92.0	86.0	76.0
Average 200 Day Adjusted Weaning Weight (lbs)	28	756	556.6	92.9	673.0	617.5	571.0	467.0	432.0
Weight (lbs) Calf Weaned per Cow Exposed	28	652	504.1	86.2	638.0	575.5	517.0	443.5	401.0

NUMBER = number of herds (groups)
MAX = maximum (largest) observation
AVERAGE = mean
STD = standard deviation
PCTL90 = 90th percentile, PCTL75 = 75th percentile, MEDIAN = 50th percentile,
PCTL25 = 25th percentile, PCTL10 = 10th percentile
all rates are expressed as percentages

Table 39. Herd Management Practices Used by **Huron County** Producers in the Ontario Red Meat II Herd Health Option, in 1989

Management Practice	Number Herds	Number Yes	Percent Yes
Feed analysis	61	16	26.2
Ration formulation	61	9	14.8
Pasture improvement/rotation	61	44	72.1
Pregnancy examinations	61	54	88.5
Crossbreeding	61	51	83.6
Bull breeding soundness evaluation	61	14	23.0
Vaccinations	61	55	90.2
Deworming	61	54	88.5
Lice/warble treatment	61	59	96.7
Fly control	61	45	73.8
Postmortem examination	61	40	65.6
Vitamin E-Se injection	61	56	91.8
Growth promotants	61	30	49.2
Early dehorning	61	40	65.6
Polled	61	2	3.3
Early castration	61	40	65.6
Creep feeding	61	37	60.7

Table 40. Averages and Location of Measures of Herd Performance, Huron County, Ontario Red Meat II Herd Health Option, 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
Number									
Heifers	58	92	9.2	13.9	23.0	10.0	6.0	2.0	0.0
Cows	61	176	43.6	33.7	74.0	53.0	33.0	24.0	17.0
Bulls	59	8	1.9	1.9	5.0	2.0	1.0	1.0	0.0
Exposed to Mating	61	214	50.0	41.3	88.0	57.0	35.0	26.0	17.0
Calves Weaned	60	192	43.9	36.3	78.0	53.0	30.5	24.0	15.0
Length of Calving Season									
Calving Spread (days)	58	385	144.5	89.8	290.0	184.0	112.5	77.0	54.0
Breeding Success / Removals									
Open Rate	60	18	3.9	4.8	11.5	6.0	3.0	0.0	0.0
Removed Rate	59	44	11.2	8.9	23.0	16.0	10.0	5.0	0.0
Calving Success									
Calving Rate	59	109	95.2	9.8	104.0	100.0	100.0	92.0	84.0
Liveborn Calving Rate	59	105	91.3	9.8	101.0	97.0	93.0	88.0	81.0
Stillborn Rate	59	12	4.2	3.4	8.0	6.0	4.0	0.0	0.0
Assisted Calving Rate	59	100	11.7	14.1	23.0	15.0	8.0	5.0	0.0
Calf Survival and Treatment									
Calf Mortality Rate	55	23	3.5	5.4	10.0	5.0	0.0	0.0	0.0
Calf Treatment Rate	55	100	22.4	30.3	100.0	23.0	11.0	4.0	0.0
Productivity									
Weaned Calf Crop Rate	60	105	88.3	10.3	100.0	95.0	89.0	82.5	76.0
Average 200 Day Adjusted Weaning Weight (lbs)	60	722	533.1	73.3	634.0	590.0	519.5	476.5	447.0
Weight (lbs) Calf Weaned per Cow Exposed	60	733	472.0	93.0	603.5	511.0	464.5	406.0	371.0

NUMBER = number of herds (groups)
MAX = maximum (largest) observation
AVERAGE = mean
STD = standard deviation
PCTL90 = 90th percentile, PCTL75 = 75th percentile, MEDIAN = 50th percentile,
PCTL25 = 25th percentile, PCTL10 = 10th percentile
all rates are expressed as percentages

Table 41. Herd Management Practices Used by Kenora District Producers in the Ontario Red Meat II Herd Health Option, in 1989

Management Practice	Number Herds	Number Yes	Percent Yes
Feed analysis	0	0	0.0
Ration formulation	0	0	0.0
Pasture improvement/rotation	0	0	0.0
Pregnancy examinations	0	0	0.0
Crossbreeding	0	0	0.0
Bull breeding soundness evaluation	0	0	0.0
Vaccinations	0	0	0.0
Deworming	0	0	0.0
Lice/warble treatment	0	0	0.0
Fly control	0	0	0.0
Postmortem examination	0	0	0.0
Vitamin E-Se injection	0	0	0.0
Growth promotants	0	0	0.0
Early dehorning	0	0	0.0
Polled	0	0	0.0
Early castration	0	0	0.0
Creep feeding	0	0	0.0

Table 42. Averages and Location of Measures of Herd Performance, Kenora District, Ontario Red Meat II Herd Health Option, 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
Number									
Heifers	0	0	.	.	.	.	.	.	.
Cows	0	0	.	.	.	.	.	.	.
Bulls	0	0	.	.	.	.	.	.	.
Exposed to Mating	0	0	.	.	.	.	.	.	.
Calves Weaned	0	0	.	.	.	.	.	.	.
Length of Calving Season									
Calving Spread (days)	0	0	.	.	.	.	.	.	.
Breeding Success / Removals									
Open Rate	0	0	.	.	.	.	.	.	.
Removed Rate	0	0	.	.	.	.	.	.	.
Calving Success									
Calving Rate	0	0	.	.	.	.	.	.	.
Liveborn Calving Rate	0	0	.	.	.	.	.	.	.
Stillborn Rate	0	0	.	.	.	.	.	.	.
Assisted Calving Rate	0	0	.	.	.	.	.	.	.
Calf Survival and Treatment									
Calf Mortality Rate	0	0	.	.	.	.	.	.	.
Calf Treatment Rate	0	0	.	.	.	.	.	.	.
Productivity									
Weaned Calf Crop Rate	0	0	.	.	.	.	.	.	.
Average 200 Day Adjusted Weaning Weight (lbs)	0	0	.	.	.	.	.	.	.
Weight (lbs) Calf Weaned per Cow Exposed	0	0	.	.	.	.	.	.	.

NUMBER = number of herds (groups)
MAX = maximum (largest) observation
AVERAGE = mean
STD = standard deviation
PCTL90 = 90th percentile, PCTL75 = 75th percentile, MEDIAN = 50th percentile,
PCTL25 = 25th percentile, PCTL10 = 10th percentile
all rates are expressed as percentages

Table 43. Herd Management Practices Used by **Kent County** Producers in the Ontario Red Meat II Herd Health Option, in 1989

Management Practice	Number Herds	Number Yes	Percent Yes
Feed analysis	11	6	54.5
Ration formulation	11	6	54.5
Pasture improvement/rotation	11	7	63.6
Pregnancy examinations	11	9	81.8
Crossbreeding	11	9	81.8
Bull breeding soundness evaluation	11	5	45.5
Vaccinations	11	8	72.7
Deworming	11	8	72.7
Lice/warble treatment	11	8	72.70
Fly control	11	8	72.7
Postmortem examination	11	4	36.4
Vitamin E-Se injection	11	7	63.6
Growth promotants	11	5	45.5
Early dehorning	11	6	54.5
Polled	11	2	18.2
Early castration	11	8	72.7
Creep feeding	11	7	63.6

Table 44. Averages and Location of Measures of Herd Performance, Kent County, Ontario Red Meat II Herd Health Option, 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
Number									
Heifers	10	30	9.0	9.9	25.0	16.0	5.0	2.0	0.5
Cows	11	203	53.0	55.2	81.0	80.0	35.0	18.0	16.0
Bulls	9	10	2.7	2.9	10.0	3.0	2.0	1.0	0.0
Exposed to Mating	10	110	42.8	31.9	95.5	53.0	33.5	18.0	13.0
Calves Weaned	10	77	35.5	24.8	76.5	51.0	27.0	16.0	12.5
Length of Calving Season									
Calving Spread (days)	10	346	129.3	91.9	287.5	127.0	104.0	77.0	45.5
Breeding Success / Removals									
Open Rate	10	19	6.2	5.8	14.0	9.0	6.5	0.0	0.0
Removed Rate	10	29	9.5	8.8	24.5	9.0	8.0	5.0	0.0
Calving Success									
Calving Rate	10	100	91.6	9.4	100.0	100.0	93.5	91.0	75.0
Liveborn Calving Rate	10	100	89.4	8.8	98.0	95.0	91.5	89.0	74.0
Stillborn Rate	10	12	2.4	3.8	8.0	4.0	0.5	0.0	0.0
Assisted Calving Rate	8	14	9.1	3.6	14.0	11.5	9.5	7.0	3.0
Calf Survival and Treatment									
Calf Mortality Rate	9	25	4.9	8.5	25.0	3.0	1.0	0.0	0.0
Calf Treatment Rate	8	31	9.5	9.6	31.0	12.0	6.5	4.0	0.0
Productivity									
Weaned Calf Crop Rate	10	100	85.9	11.0	98.0	94.0	90.5	74.0	71.0
Average 200 Day Adjusted Weaning Weight (lbs)	10	569	487.4	57.8	562.5	547.0	485.5	432.0	411.0
Weight (lbs) Calf Weaned per Cow Exposed	10	494	416.3	55.1	492.0	451.0	400.5	394.0	349.5

NUMBER = number of herds (groups)
MAX = maximum (largest) observation
AVERAGE = mean
STD = standard deviation
PCTL90 = 90th percentile, PCTL75 = 75th percentile, MEDIAN = 50th percentile,
PCTL25 = 25th percentile, PCTL10 = 10th percentile
all rates are expressed as percentages

Table 45. Herd Management Practices Used by **Lambton County** Producers in the Ontario Red Meat II Herd Health Option, in 1989

Management Practice	Number Herds	Number Yes	Percent Yes
Feed analysis	12	6	50.0
Ration formulation	12	4	33.3
Pasture improvement/rotation	12	8	66.7
Pregnancy examinations	12	7	58.3
Crossbreeding	12	11	91.7
Bull breeding soundness evaluation	12	3	25.0
Vaccinations	12	9	75.0
Deworming	12	11	91.7
Lice/warble treatment	12	12	100.0
Fly control	12	11	91.7
Postmortem examination	12	6	50.0
Vitamin E-Se injection	12	12	100.0
Growth promotants	12	5	41.7
Early dehorning	12	9	75.0
Polled	12	0	0.0
Early castration	12	10	83.3
Creep feeding	12	7	58.3

Table 46. Averages and Location of Measures of Herd Performance, Lambton County, Ontario Red Meat II Herd Health Option, 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
Number									
Heifers	12	14	5.0	4.6	13.0	6.5	4.5	1.5	0.0
Cows	12	149	53.3	39.1	97.0	69.0	39.5	23.5	20.0
Bulls	12	5	2.0	1.3	3.0	2.5	2.0	1.0	1.0
Exposed to Mating	12	175	58.3	46.6	115.0	72.0	41.0	26.5	19.0
Calves Weaned	10	77	35.5	24.8	76.5	51.0	27.0	16.0	12.5
Length of Calving Season									
Calving Spread (days)	10	346	129.3	91.9	287.5	127.0	104.0	77.0	45.5
Breeding Success / Removals									
Open Rate	12	11	3.7	3.9	8.0	6.5	3.0	0.0	0.0
Removed Rate	12	21	8.8	6.9	16.0	14.5	8.5	2.0	1.0
Calving Success									
Calving Rate	12	102	96.9	4.3	100.0	100.0	99.5	93.0	92.0
Liveborn Calving Rate	12	100	92.3	6.4	99.0	96.5	94.0	88.0	84.0
Stillborn Rate	12	14	5.1	4.6	12.0	8.0	3.5	1.5	0.0
Assisted Calving Rate	11	22	12.0	6.4	18.0	17.0	13.0	7.0	6.0
Calf Survival and Treatment									
Calf Mortality Rate	12	12	4.6	3.9	8.0	7.0	5.5	0.0	0.0
Calf Treatment Rate	11	100	22.6	28.7	35.0	30.0	19.0	3.0	0.0
Productivity									
Weaned Calf Crop Rate	12	99	88.1	8.6	97.0	95.0	90.5	81.0	76.0
Average 200 Day Adjusted Weaning Weight (lbs)	11	664	552.3	60.3	608.0	597.0	549.0	506.0	499.0
Weight (lbs) Calf Weaned per Cow Exposed	11	621	480.3	63.2	537.0	513.0	478.0	424.0	421.0

NUMBER = number of herds (groups)
MAX = maximum (largest) observation
AVERAGE = mean
STD = standard deviation
PCTL90 = 90th percentile, PCTL75 = 75th percentile, MEDIAN = 50th percentile,
PCTL25 = 25th percentile, PCTL10 = 10th percentile
all rates are expressed as percentages

Table 47. Herd Management Practices Used by **Lanark County** Producers in the Ontario Red Meat II Herd Health Option, in 1989

Management Practice	Number Herds	Number Yes	Percent Yes
Feed analysis	60	8	13.3
Ration formulation	60	17	28.3
Pasture improvement/rotation	60	51	85.0
Pregnancy examinations	60	45	75.0
Crossbreeding	60	49	81.7
Bull breeding soundness evaluation	60	12	20.0
Vaccinations	60	51	85.0
Deworming	60	36	60.0
Lice/warble treatment	60	54	90.0
Fly control	60	49	81.7
Postmortem examination	60	34	56.7
Vitamin E-Se injection	60	54	90.0
Growth promotants	60	13	21.7
Early dehorning	60	35	58.3
Polled	60	10	16.7
Early castration	60	35	78.3
Creep feeding	60	31	51.7

Table 48. Averages and Location of Measures of Herd Performance, Lanark County, Ontario Red Meat II Herd Health Option, 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
Number									
Heifers	59	30	6.4	5.9	13.0	10.0	5.0	2.0	1.0
Cows	60	114	35.1	23.7	58.0	44.0	29.0	16.5	12.5
Bulls	60	5	1.5	1.1	3.0	2.0	1.0	1.0	0.0
Exposed to Mating	60	114	36.6	24.2	62.0	44.0	32.0	19.0	13.0
Calves Weaned	60	110	31.7	21.1	56.5	39.0	27.5	14.5	11.0
Length of Calving Season									
Calving Spread (days)	59	360	150.6	100.3	333.0	220.0	111.0	68.0	43.0
Breeding Success / Removals									
Open Rate	60	25	3.9	5.6	10.0	6.5	1.0	0.0	0.0
Removed Rate	60	38	13.5	9.6	29.0	18.0	10.5	8.0	4.5
Calving Success									
Calving Rate	60	108	94.6	10.1	103.0	100.0	100.0	90.0	82.5
Liveborn Calving Rate	60	108	91.4	10.8	100.0	100.0	93.5	86.0	75.0
Stillborn Rate	60	22	3.5	4.9	9.5	5.0	3.0	0.0	0.0
Assisted Calving Rate	60	50	8.2	8.6	16.5	12.0	7.5	1.0	0.0
Calf Survival and Treatment									
Calf Mortality Rate	56	33	4.9	7.1	11.0	7.0	3.5	0.0	0.0
Calf Treatment Rate	60	105	19.7	29.1	71.0	23.5	8.0	0.0	0.0
Productivity									
Weaned Calf Crop Rate	60	108	87.4	11.8	100.0	96.0	89.0	81.5	67.0
Average 200 Day Adjusted Weaning Weight (lbs)	60	680	542.1	62.7	635.0	574.5	539.5	505.0	457.5
Weight (lbs) Calf Weaned per Cow Exposed	60	646	474.3	87.3	575.5	529.0	494.0	419.0	373.0

NUMBER = number of herds (groups)
MAX = maximum (largest) observation
AVERAGE = mean
STD = standard deviation
PCTL90 = 90th percentile, PCTL75 = 75th percentile, MEDIAN = 50th percentile,
PCTL25 = 25th percentile, PCTL10 = 10th percentile
all rates are expressed as percentages

Table 49. Herd Management Practices Used by **Leeds County** Producers in the Ontario Red Meat II Herd Health Option, in 1989

Management Practice	Number Herds	Number Yes	Percent Yes
Feed analysis	12	2	16.7
Ration formulation	12	4	33.3
Pasture improvement/rotation	12	10	83.3
Pregnancy examinations	12	11	91.7
Crossbreeding	12	6	50.0
Bull breeding soundness evaluation	12	2	16.7
Vaccinations	12	10	83.3
Deworming	12	11	91.7
Lice/warble treatment	12	12	100.0
Fly control	12	12	100.0
Postmortem examination	12	7	58.3
Vitamin E-Se injection	12	11	91.7
Growth promotants	12	2	16.7
Early dehorning	12	7	58.3
Polled	12	2	16.7
Early castration	12	9	75.0
Creep feeding	12	8	66.7

Table 50. Averages and Location of Measures of Herd Performance, Leeds County, Ontario Red Meat II Herd Health Option, 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
Number									
Heifers	12	16	7.8	5.1	14.0	11.5	7.0	5.0	0.0
Cows	12	59	30.2	14.3	46.0	42.0	26.5	21.0	14.0
Bulls	12	2	1.3	0.5	2.0	2.0	1.0	1.0	1.0
Exposed to Mating	12	65	35.5	16.9	57.0	48.0	34.5	21.5	16.0
Calves Weaned	11	45	25.5	10.9	37.0	35.0	25.0	14.0	13.0
Length of Calving Season									
Calving Spread (days)	11	317	131.6	92.9	262.0	231.0	88.0	76.0	51.0
Breeding Success / Removals									
Open Rate	12	15	5.0	5.1	12.0	8.5	4.0	0.0	0.0
Removed Rate	12	54	18.7	16.1	46.0	22.5	12.0	9.5	8.0
Calving Success									
Calving Rate	12	104	86.3	15.6	100.0	96.0	91.0	80.0	67.0
Liveborn Calving Rate	12	100	81.3	14.7	94.0	93.0	83.5	75.5	67.0
Stillborn Rate	12	24	5.5	6.6	9.0	7.0	4.5	0.0	0.0
Assisted Calving Rate	12	53	15.8	16.2	36.0	24.5	10.5	5.5	0.0
Calf Survival and Treatment									
Calf Mortality Rate	11	15	6.3	4.9	14.0	8.0	7.0	3.0	0.0
Calf Treatment Rate	11	100	21.0	27.7	29.0	20.0	13.0	7.0	0.0
Productivity									
Weaned Calf Crop Rate	11	96	79.2	10.8	90.0	90.0	79.0	70.0	65.0
Average 200 Day Adjusted Weaning Weight (lbs)	11	706	597.5	68.2	670.0	636.0	602.0	540.0	501.0
Weight (lbs) Calf Weaned per Cow Exposed	11	635	477.5	103.4	606.0	567.0	489.0	403.0	332.0

NUMBER = number of herds (groups)
MAX = maximum (largest) observation
AVERAGE = mean
STD = standard deviation
PCTL90 = 90th percentile, PCTL75 = 75th percentile, MEDIAN = 50th percentile,
PCTL25 = 25th percentile, PCTL10 = 10th percentile
all rates are expressed as percentages

Table 51. Herd Management Practices Used by Lennox.Addington County Producers in the Ontario Red Meat II Herd Health Option, in 1989

Management Practice	Number Herds	Number Yes	Percent Yes
Feed analysis	21	8	38.1
Ration formulation	21	6	28.6
Pasture improvement/rotation	21	14	66.7
Pregnancy examinations	21	17	81.0
Crossbreeding	21	18	85.7
Bull breeding soundness evaluation	21	4	19.0
Vaccinations	21	17	81.0
Deworming	21	10	47.6
Lice/warble treatment	21	20	95.2
Fly control	21	14	66.7
Postmortem examination	21	7	33.3
Vitamin E-Se injection	21	16	76.2
Growth promotants	21	3	14.3
Early dehorning	21	13	61.9
Polled	21	0	0.0
Early castration	21	18	85.7
Creep feeding	21	15	71.4

Table 52. **Averages and Location of Measures of Herd Performance, Lennox. Addington County**, Ontario Red Meat II Herd Health Option, 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
Number									
Heifers	19	70	10.6	14.7	12.0	10.0	8.0	6.0	2.0
Cows	21	74	42.9	18.1	67.0	55.0	44.0	25.0	18.0
Bulls	20	5	1.9	1.1	3.5	2.0	2.0	1.0	1.0
Exposed to Mating	21	68	42.6	15.3	60.0	52.0	45.0	31.0	20.0
Calves Weaned	21	66	36.6	15.1	52.0	50.0	37.0	21.0	16.0
Length of Calving Season									
Calving Spread (days)	20	363	140.1	78.1	250.5	158.5	116.0	82.5	76.5
Breeding Success / Removals									
Open Rate	21	13	3.8	4.1	9.0	7.0	3.0	0.0	0.0
Removed Rate	21	51	12.7	12.2	24.0	17.0	10.0	5.0	0.0
Calving Success									
Calving Rate	21	102	93.5	11.3	100.0	100.0	97.0	93.0	88.0
Liveborn Calving Rate	12	100	81.3	14.7	94.0	93.0	83.5	75.5	67.0
Stillborn Rate	21	15	3.6	4.3	9.0	6.0	2.0	0.0	0.0
Assisted Calving Rate	21	42	14.3	13.1	36.0	23.0	10.0	6.0	0.0
Calf Survival and Treatment									
Calf Mortality Rate	20	30	6.1	8.3	19.0	7.0	4.0	0.0	0.0
Calf Treatment Rate	21	100	16.4	21.7	29.0	19.0	14.0	4.0	0.0
Productivity									
Weaned Calf Crop Rate	21	100	85.6	14.9	98.0	97.0	90.0	83.0	67.0
Average 200 Day Adjusted Weaning Weight (lbs)	21	705	537.9	74.7	637.0	560.0	546.0	477.0	450.0
Weight (lbs) Calf Weaned per Cow Exposed	21	661	462.9	104.9	549.0	534.0	470.0	429.0	378.0

NUMBER = number of herds (groups)
MAX = maximum (largest) observation
AVERAGE = mean
STD = standard deviation
PCTL90 = 90th percentile, PCTL75 = 75th percentile, MEDIAN = 50th percentile,
PCTL25 = 25th percentile, PCTL10 = 10th percentile
all rates are expressed as percentages

Table 53. Herd Management Practices Used by Manitoulin Producers in the Ontario Red Meat II Herd Health Option, in 1989

Management Practice	Number Herds	Number Yes	Percent Yes
Feed analysis	35	32	91.4
Ration formulation	35	14	40.0
Pasture improvement/rotation	35	29	82.9
Pregnancy examinations	35	25	71.4
Crossbreeding	35	33	94.3
Bull breeding soundness evaluation	35	13	37.1
Vaccinations	35	33	94.3
Deworming	35	35	100.0
Lice/warble treatment	35	34	97.1
Fly control	35	31	88.6
Postmortem examination	35	11	31.4
Vitamin E-Se injection	35	22	62.9
Growth promotants	35	11	31.4
Early dehorning	35	20	57.1
Polled	35	1	2.9
Early castration	35	21	60.0
Creep feeding	35	30	85.7

Table 54. Averages and Location of Measures of Herd Performance, Manitoulin Island, Ontario Red Meat II Herd Health Option, 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
Number									
Heifers	33	55	11.8	12.8	28.0	16.0	8.0	3.0	0.0
Cows	34	194	60.7	45.8	122.0	75.0	47.5	28.0	22.0
Bulls	34	7	2.0	1.6	4.0	2.0	1.0	1.0	1.0
Exposed to Mating	35	194	60.2	46.3	130.0	73.0	44.0	30.0	22.0
Calves Weaned	35	169	52.3	40.7	109.0	55.0	35.0	28.0	17.0
Length of Calving Season									
Calving Spread (days)	35	354	155.6	99.7	314.0	243.0	124.0	64.0	53.0
Breeding Success / Removals									
Open Rate	35	10	3.5	3.2	8.0	6.0	3.0	0.0	0.0
Removed Rate	35	41	11.8	9.8	25.0	18.0	9.0	5.0	0.0
Calving Success									
Calving Rate	35	110	94.9	9.0	100.0	100.0	95.0	93.0	82.0
Liveborn Calving Rate	35	110	90.9	10.1	100.0	97.0	92.0	85.0	80.0
Stillborn Rate	35	17	4.4	4.0	8.0	6.0	4.0	2.0	0.0
Assisted Calving Rate	35	29	6.5	6.9	17.0	8.0	5.0	3.0	0.0
Calf Survival and Treatment									
Calf Mortality Rate	32	39	4.9	7.9	12.0	6.5	2.5	0.0	0.0
Calf Treatment Rate	35	90	15.9	19.3	47.0	24.0	9.0	4.0	0.0
Productivity									
Weaned Calf Crop Rate	35	100	87.4	8.3	96.0	94.0	90.0	80.0	75.0
Average 200 Day Adjusted Weaning Weight (lbs)	33	686	513.3	67.3	594.0	559.0	506.0	465.0	429.0
Weight (lbs) Calf Weaned per Cow Exposed	33	568	449.5	65.1	536.0	493.0	455.0	406.0	375.0

NUMBER = number of herds (groups)
MAX = maximum (largest) observation
AVERAGE = mean
STD = standard deviation
PCTL90 = 90th percentile, PCTL75 = 75th percentile, MEDIAN = 50th percentile,
PCTL25 = 25th percentile, PCTL10 = 10th percentile
all rates are expressed as percentages

Table 55. Herd Management Practices Used by Middlesex County Producers in the Ontario Red Meat II Herd Health Option, in 1990

Management Practice	Number Herds	Number Yes	Percent Yes
Feed analysis	21	7	33.3
Ration formulation	21	6	28.6
Pasture improvement/rotation	21	14	66.7
Pregnancy examinations	21	17	81.0
Crossbreeding	21	16	76.2
Bull breeding soundness evaluation	21	6	28.6
Vaccinations	21	17	81.0
Deworming	21	18	85.7
Lice/warble treatment	21	21	100.0
Fly control	21	16	76.2
Postmortem examination	21	11	52.4
Vitamin E-Se injection	21	17	81.0
Growth promotants	21	11	52.4
Early dehorning	21	15	71.4
Polled	21	1	4.8
Early castration	21	13	61.9
Creep feeding	21	15	71.4

Table 56. Averages and Location of Measures of Herd Performance, Middlesex County, Ontario Red Meat II Herd Health Option, 1990

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
Number									
Heifers	20	28	7.9	7.7	19.0	13.0	5.0	2.5	0.0
Cows	21	172	57.0	50.6	138.0	80.0	36.0	18.0	13.0
Bulls	21	10	2.6	2.5	6.0	4.0	2.0	1.0	1.0
Exposed to Mating	21	172	63.5	50.9	138.0	90.0	48.0	22.0	15.0
Calves Weaned	21	158	54.8	46.5	131.0	75.0	35.0	20.0	15.0
Length of Calving Season									
Calving Spread (days)	21	313	160.2	86.6	284.0	224.0	143.0	93.0	70.0
Breeding Success / Removals									
Open Rate	21	31	4.6	7.0	8.0	7.0	3.0	0.0	0.0
Removed Rate	21	33	9.9	9.3	21.0	14.0	8.0	2.0	0.0
Calving Success									
Calving Rate	21	112	95.7	8.7	100.0	100.0	97.0	92.0	90.0
Liveborn Calving Rate	21	104	91.3	13.3	100.0	100.0	95.0	88.0	84.0
Stillborn Rate	21	38	5.3	8.9	14.0	7.0	2.0	0.0	0.0
Assisted Calving Rate	21	29	9.9	9.3	26.0	13.0	6.0	4.0	0.0
Calf Survival and Treatment									
Calf Mortality Rate	21	31	5.8	8.0	16.0	9.0	3.0	0.0	0.0
Calf Treatment Rate	21	100	22.4	26.8	47.0	29.0	19.0	4.0	0.0
Productivity									
Weaned Calf Crop Rate	21	100	85.8	13.4	100.0	95.0	87.0	83.0	73.0
Average 200 Day Adjusted Weaning Weight (lbs)	20	750	552.2	92.8	699.0	584.5	544.0	490.5	442.5
Weight (lbs) Calf Weaned per Cow Exposed	20	750	473.7	118.9	629.5	520.5	474.0	411.0	348.0

NUMBER = number of herds (groups)
MAX = maximum (largest) observation
AVERAGE = mean
STD = standard deviation
PCTL90 = 90th percentile, PCTL75 = 75th percentile, MEDIAN = 50th percentile,
PCTL25 = 25th percentile, PCTL10 = 10th percentile
all rates are expressed as percentages

Table 57. Herd Management Practices Used by **Muskoka District** Producers in the Ontario Red Meat II Herd Health Option, in 1989

Management Practice	Number Herds	Number Yes	Percent Yes
Feed analysis	1	0	0.0
Ration formulation	1	0	0.0
Pasture improvement/rotation	1	1	100.0
Pregnancy examinations	1	1	100.0
Crossbreeding	1	1	100.0
Bull breeding soundness evaluation	1	1	100.0
Vaccinations	1	0	0.0
Deworming	1	1	100.0
Lice/warble treatment	1	1	100.0
Fly control	1	1	100.0
Postmortem examination	1	0	0.0
Vitamin E-Se injection	1	1	100.0
Growth promotants	1	0	0.0
Early dehorning	1	0	0.0
Polled	1	0	0.0
Early castration	1	1	100.0
Creep feeding	1	1	100.0

Table 58. Averages and Location of Measures of Herd Performance, Muskoka District, Ontario Red Meat II Herd Health Option, 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
Number									
Heifers	1	9	9.0	.	9.0	9.0	9.0	9.0	9.0
Cows	1	33	33.0	.	33.0	33.0	33.0	33.0	33.0
Bulls	1	1	1.0	.	1.0	1.0	1.0	1.0	1.0
Exposed to Mating	1	42	42.0	.	42.0	42.0	42.0	42.0	42.0
Calves Weaned	1	32	32.0	.	32.0	32.0	32.0	32.0	32.0
Length of Calving Season									
Calving Spread (days)	1	140	140.0	.	140.0	140.0	140.0	140.0	140.0
Breeding Success / Removals									
Open Rate	1	2	2.0	.	2.0	2.0	2.0	2.0	2.0
Removed Rate	1	7	7.0	.	7.0	7.0	7.0	7.0	7.0
Calving Success									
Calving Rate	1	76	76.0	.	76.0	76.0	76.0	76.0	76.0
Liveborn Calving Rate	1	76	76.0	.	76.0	76.0	76.0	76.0	76.0
Stillborn Rate	1	0	0.0	.	0.0	0.0	0.0	0.0	0.0
Assisted Calving Rate	1	22	22.0	.	22.0	22.0	22.0	22.0	22.0
Calf Survival and Treatment									
Calf Mortality Rate	1	0	0.0	.	0.0	0.0	0.0	0.0	0.0
Calf Treatment Rate	1	100	100.0	.	100.0	100.0	100.0	100.0	100.0
Productivity									
Weaned Calf Crop Rate	1	76	76.0	.	76.0	76.0	76.0	76.0	76.0
Average 200 Day Adjusted Weaning Weight (lbs)	0	0	.	.	.	.	.	.	.
Weight (lbs) Calf Weaned per Cow Exposed	0	0	.	.	.	.	.	.	.

NUMBER = number of herds (groups)
MAX = maximum (largest) observation
AVERAGE = mean
STD = standard deviation
PCTL90 = 90th percentile, PCTL75 = 75th percentile, MEDIAN = 50th percentile,
PCTL25 = 25th percentile, PCTL10 = 10th percentile
all rates are expressed as percentages

Table 59. Herd Management Practices Used by **Niagara District** Producers in the Ontario Red Meat II Herd Health Option, in 1989

Management Practice	Number Herds	Number Yes	Percent Yes
Feed analysis	4	0	0.0
Ration formulation	4	0	0.0
Pasture improvement/rotation	4	3	75.0
Pregnancy examinations	4	2	50.0
Crossbreeding	4	4	100.0
Bull breeding soundness evaluation	4	2	50.0
Vaccinations	4	2	50.0
Deworming	4	1	25.0
Lice/warble treatment	4	3	75.0
Fly control	4	0	0.0
Postmortem examination	4	0	0.0
Vitamin E-Se injection	4	3	75.0
Growth promotants	4	0	0.0
Early dehorning	4	2	50.0
Polled	3	0	0.0
Early castration	4	3	75.0
Creep feeding	4	3	75.0

Table 60. Averages and Location of Measures of Herd Performance, Niagara District, Ontario Red Meat II Herd Health Option, 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
Number									
Heifers	4	5	1.5	2.4	5.0	3.0	0.5	0.0	0.0
Cows	4	47	24.2	16.4	47.0	36.0	20.0	12.5	10.0
Bulls	4	1	0.7	0.5	1.0	1.0	1.0	0.5	0.0
Exposed to Mating	4	58	28.2	20.8	58.0	41.5	22.5	15.0	10.0
Calves Weaned	4	49	26.0	16.5	49.0	37.0	22.5	15.0	10.0
Length of Calving Season									
Calving Spread (days)	4	283	129.7	102.9	283.0	185.5	87.5	74.0	61.0
Breeding Success / Removals									
Open Rate	4	10	3.0	4.8	10.0	6.0	1.0	0.0	0.0
Removed Rate	4	30	13.3	13.8	30.0	24.5	11.5	2.0	0.0
Calving Success									
Calving Rate	4	100	100.0	0.0	100.0	100.0	100.0	100.0	100.0
Liveborn Calving Rate	4	100	99.3	1.5	100.0	100.0	100.0	98.5	97.0
Stillborn Rate	4	4	1.0	2.0	4.0	2.0	0.0	0.0	0.0
Assisted Calving Rate	4	15	9.3	6.5	15.0	13.5	11.0	5.0	0.0
Calf Survival and Treatment									
Calf Mortality Rate	4	12	3.0	6.0	12.0	6.0	0.0	0.0	0.0
Calf Treatment Rate	4	50	30.8	14.2	50.0	40.0	28.5	21.5	16.0
Productivity									
Weaned Calf Crop Rate	4	100	96.0	8.0	100.0	100.0	100.0	92.0	84.0
Average 200 Day Adjusted Weaning Weight (lbs)	4	660	585.8	70.7	660.0	644.0	588.5	527.5	506.0
Weight (lbs) Calf Weaned per Cow Exposed	4	660	564.5	94.3	660.0	644.0	567.0	485.0	464.0

NUMBER = number of herds (groups)
MAX = maximum (largest) observation
AVERAGE = mean
STD = standard deviation
PCTL90 = 90th percentile, PCTL75 = 75th percentile, MEDIAN = 50th percentile,
PCTL25 = 25th percentile, PCTL10 = 10th percentile
all rates are expressed as percentages

Table 61. Herd Management Practices Used by Nipissing District Producers in the Ontario Red Meat II Herd Health Option, in 1989

Management Practice	Number Herds	Number Yes	Percent Yes
Feed analysis	9	5	55.6
Ration formulation	9	4	44.4
Pasture improvement/rotation	9	7	77.8
Pregnancy examinations	9	5	55.6
Crossbreeding	9	6	66.7
Bull breeding soundness evaluation	9	2	22.2
Vaccinations	9	7	77.8
Deworming	9	5	55.6
Lice/warble treatment	9	9	100.0
Fly control	9	4	44.4
Postmortem examination	9	1	11.1
Vitamin E-Se injection	9	8	88.9
Growth promotants	9	0	0.0
Early dehorning	9	5	55.6
Polled	9	0	0.0
Early castration	9	7	77.8
Creep feeding	9	3	33.3

Table 62. Averages and Location of Measures of Herd Performance, Nipissing District, Ontario Red Meat II Herd Health Option, 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
Number									
Heifers	9	10	2.8	3.7	10.0	5.0	0.0	0.0	0.0
Cows	9	51	21.3	12.8	51.0	25.0	19.0	12.0	10.0
Bulls	9	3	1.3	0.7	3.0	1.0	1.0	1.0	1.0
Exposed to Mating	9	48	23.8	12.4	48.0	29.0	26.0	12.0	10.0
Calves Weaned	9	50	22.1	13.2	50.0	26.0	20.0	12.0	10.0
Length of Calving Season									
Calving Spread (days)	9	263	108.8	63.7	263.0	122.0	89.0	78.0	47.0
Breeding Success / Removals									
Open Rate	9	46	6.2	15.1	46.0	3.0	0.0	0.0	0.0
Removed Rate	7	46	10.0	16.7	46.0	14.0	4.0	0.0	0.0
Calving Success									
Calving Rate	9	104	93.8	16.7	104.0	100.0	100.0	97.0	50.0
Liveborn Calving Rate	9	100	91.9	16.4	100.0	100.0	100.0	94.0	50.0
Stillborn Rate	9	10	1.9	3.8	10.0	0.0	0.0	0.0	0.0
Assisted Calving Rate	7	17	4.0	7.0	17.0	11.0	0.0	0.0	0.0
Calf Survival and Treatment									
Calf Mortality Rate	7	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Calf Treatment Rate	8	100	58.9	46.7	100.0	100.0	79.5	6.0	0.0
Productivity									
Weaned Calf Crop Rate	9	104	93.4	16.7	104.0	100.0	100.0	97.0	50.0
Average 200 Day Adjusted Weaning Weight (lbs)	9	601	536.7	63.6	601.0	588.0	583.0	466.0	459.0
Weight (lbs) Calf Weaned per Cow Exposed	9	612	504.6	116.1	612.0	583.0	539.0	465.0	233.0

NUMBER = number of herds (groups)
MAX = maximum (largest) observation
AVERAGE = mean
STD = standard deviation
PCTL90 = 90th percentile, PCTL75 = 75th percentile, MEDIAN = 50th percentile,
PCTL25 = 25th percentile, PCTL10 = 10th percentile
all rates are expressed as percentages

Table 63. Herd Management Practices Used by **Northumberland County** Producers in the Ontario Red Meat II Herd Health Option, in 1989

Management Practice	Number Herds	Number Yes	Percent Yes
Feed analysis	19	4	21.1
Ration formulation	19	4	21.1
Pasture improvement/rotation	19	9	47.4
Pregnancy examinations	19	16	84.2
Crossbreeding	19	12	63.2
Bull breeding soundness evaluation	19	5	26.3
Vaccinations	19	18	94.7
Deworming	19	16	84.2
Lice/warble treatment	19	19	100.0
Fly control	19	15	78.9
Postmortem examination	19	9	47.7
Vitamin E-Se injection	19	18	94.7
Growth promotants	19	5	26.3
Early dehorning	19	10	52.6
Polled	19	2	10.5
Early castration	19	14	73.7
Creep feeding	19	14	73.7

Table 64. Averages and Location of Measures of Herd Performance, **Northumberland County**, Ontario Red Meat II Herd Health Option, 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
Number									
Heifers	19	30	9.2	7.7	22.0	12.0	7.0	3.0	3.0
Cows	19	95	37.3	25.6	95.0	49.0	35.0	18.0	11.0
Bulls	18	5	2.0	1.4	5.0	2.0	2.0	1.0	0.0
Exposed to Mating	18	110	42.4	31.1	110.0	50.0	38.5	18.0	14.0
Calves Weaned	19	99	36.4	27.6	99.0	41.0	31.0	17.0	11.0
Length of Calving Season									
Calving Spread (days)	18	362	137.4	98.5	308.0	170.0	94.5	70.0	44.0
Breeding Success / Removals									
Open Rate	17	21	5.0	5.5	14.0	6.0	5.0	2.0	0.0
Removed Rate	18	36	11.0	9.8	24.0	17.0	7.5	3.0	0.0
Calving Success									
Calving Rate	18	111	95.1	6.9	100.0	100.0	95.5	93.0	86.0
Liveborn Calving Rate	18	100	92.4	5.5	100.0	95.0	93.0	88.0	86.0
Stillborn Rate	18	11	2.8	3.7	10.0	5.0	1.5	0.0	0.0
Assisted Calving Rate	18	58	13.4	12.3	25.0	17.0	8.5	7.0	6.0
Calf Survival and Treatment									
Calf Mortality Rate	18	14	3.2	4.6	14.0	5.0	0.5	0.0	0.0
Calf Treatment Rate	17	100	18.6	31.5	100.0	19.0	8.0	0.0	0.0
Productivity									
Weaned Calf Crop Rate	18	100	89.4	7.7	100.0	95.0	90.5	86.0	75.0
Average 200 Day Adjusted Weaning Weight (lbs)	17	658	584.7	55.0	655.0	614.0	592.0	552.0	494.0
Weight (lbs) Calf Weaned per Cow Exposed	17	645	521.9	64.5	612.0	545.0	522.0	479.0	453.0

NUMBER = number of herds (groups)
MAX = maximum (largest) observation
AVERAGE = mean
STD = standard deviation
PCTL90 = 90th percentile, PCTL75 = 75th percentile, MEDIAN = 50th percentile,
PCTL25 = 25th percentile, PCTL10 = 10th percentile
all rates are expressed as percentages

Table 65. Herd Management Practices Used by **Ottawa.Carlton County** Producers in the Ontario Red Meat II Herd Health Option, in 1989

Management Practice	Number Herds	Number Yes	Percent Yes
Feed analysis	32	6	18.8
Ration formulation	32	8	25.0
Pasture improvement/rotation	32	26	81.2
Pregnancy examinations	32	29	90.6
Crossbreeding	32	21	65.6
Bull breeding soundness evaluation	32	11	34.4
Vaccinations	32	26	81.2
Deworming	32	29	90.6
Lice/warble treatment	32	32	100.0
Fly control	32	24	75.0
Postmortem examination	32	10	31.3
Vitamin E-Se injection	32	29	90.6
Growth promotants	32	2	6.2
Early dehorning	32	15	46.9
Polled	32	6	18.8
Early castration	32	20	62.5
Creep feeding	32	17	53.1

Table 66. Averages and Location of Measures of Herd Performance, Ottawa.Carlton County, Ontario Red Meat II Herd Health Option, 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
Number									
Heifers	32	61	12.2	13.3	29.0	14.0	8.0	4.0	2.0
Cows	32	112	37.1	24.2	78.0	40.0	27.5	23.0	21.0
Bulls	32	8	1.8	1.6	3.0	2.0	1.0	1.0	1.0
Exposed to Mating	31	108	38.2	23.0	79.0	45.0	31.0	23.0	21.0
Calves Weaned	30	93	32.9	19.4	67.5	39.0	25.0	20.0	16.5
Length of Calving Season									
Calving Spread (days)	31	364	138.7	71.8	236.0	179.0	118.0	87.0	78.0
Breeding Success / Removals									
Open Rate	31	25	4.4	5.2	9.0	6.0	4.0	0.0	0.0
Removed Rate	30	49	11.8	10.9	23.5	13.0	10.0	5.0	1.5
Calving Success									
Calving Rate	30	104	92.8	7.7	100.0	100.0	95.0	90.0	79.5
Liveborn Calving Rate	31	100	89.7	8.3	100.0	97.0	91.0	83.0	77.0
Stillborn Rate	30	13	3.0	3.8	8.5	5.0	2.0	0.0	0.0
Assisted Calving Rate	30	40	9.9	10.2	27.5	13.0	5.5	3.0	0.0
Calf Survival and Treatment									
Calf Mortality Rate	29	14	3.5	3.9	10.0	5.0	3.0	0.0	0.0
Calf Treatment Rate	30	100	23.2	28.6	69.0	36.0	11.5	4.0	0.0
Productivity									
Weaned Calf Crop Rate	30	100	87.0	7.9	97.5	93.0	86.5	83.0	75.5
Average 200 Day Adjusted Weaning Weight (lbs)	30	732	575.1	75.2	689.5	604.0	569.0	534.0	505.5
Weight (lbs) Calf Weaned per Cow Exposed	29	725	497.0	78.9	556.0	537.0	503.0	449.0	415.0

NUMBER = number of herds (groups)
MAX = maximum (largest) observation
AVERAGE = mean
STD = standard deviation
PCTL90 = 90th percentile, PCTL75 = 75th percentile, MEDIAN = 50th percentile,
PCTL25 = 25th percentile, PCTL10 = 10th percentile
all rates are expressed as percentages

Table 67. Herd Management Practices Used by **Oxford County** Producers in the Ontario Red Meat II Herd Health Option, in 1989

Management Practice	Number Herds	Number Yes	Percent Yes
Feed analysis	11	4	36.4
Ration formulation	11	3	27.3
Pasture improvement/rotation	11	7	63.6
Pregnancy examinations	11	11	100.0
Crossbreeding	11	10	90.9
Bull breeding soundness evaluation	11	5	45.5
Vaccinations	11	9	81.8
Deworming	11	9	81.8
Lice/warble treatment	11	10	90.9
Fly control	11	7	63.6
Postmortem examination	11	6	54.4
Vitamin E-Se injection	11	11	100.0
Growth promotants	11	3	27.3
Early dehorning	11	5	45.5
Polled	11	1	9.2
Early castration	11	4	36.4
Creep feeding	11	8	72.7

Table 68. Averages and Location of Measures of Herd Performance, **Oxford County**, Ontario Red Meat II Herd Health Option, 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
Number									
Heifers	11	20	7.5	7.3	18.0	15.0	5.0	2.0	0.0
Cows	11	118	40.7	32.6	68.0	67.0	25.0	18.0	16.0
Bulls	11	10	2.4	2.7	4.0	2.0	1.0	1.0	1.0
Exposed to Mating	11	134	45.1	38.0	79.0	74.0	27.0	18.0	16.0
Calves Weaned	11	113	39.6	31.4	69.0	66.0	26.0	17.0	16.0
Length of Calving Season									
Calving Spread (days)	11	185	105.4	37.5	148.0	136.0	99.0	81.0	66.0
Breeding Success / Removals									
Open Rate	11	22	6.6	7.4	16.0	11.0	4.0	0.0	0.0
Removed Rate	10	22	12.2	7.0	20.5	19.0	13.5	7.0	2.5
Calving Success									
Calving Rate	11	100	95.3	6.1	100.0	100.0	97.0	89.0	89.0
Liveborn Calving Rate	11	100	92.4	7.0	100.0	100.0	93.0	89.0	86.0
Stillborn Rate	11	7	3.0	3.0	7.0	6.0	3.0	0.0	0.0
Assisted Calving Rate	11	22	9.2	8.0	22.0	17.0	6.0	4.0	0.0
Calf Survival and Treatment									
Calf Mortality Rate	10	10	1.7	3.1	6.5	2.0	0.0	0.0	0.0
Calf Treatment Rate	11	100	28.5	36.6	100.0	32.0	13.0	7.0	0.0
Productivity									
Weaned Calf Crop Rate	11	100	91.7	7.8	100.0	100.0	93.0	84.0	84.0
Average 200 Day Adjusted Weaning Weight (lbs)	11	655	515.7	75.9	596.0	563.0	515.0	431.0	425.0
Weight (lbs) Calf Weaned per Cow Exposed	11	586	472.0	71.5	563.0	539.0	451.0	425.0	410.0

NUMBER = number of herds (groups)
MAX = maximum (largest) observation
AVERAGE = mean
STD = standard deviation
PCTL90 = 90th percentile, PCTL75 = 75th percentile, MEDIAN = 50th percentile,
PCTL25 = 25th percentile, PCTL10 = 10th percentile
all rates are expressed as percentages

Table 69. Herd Management Practices Used by **Parry Sound District** Producers in the Ontario Red Meat II Herd Health Option, in 1989

Management Practice	Number Herds	Number Yes	Percent Yes
Feed analysis	1	1	100.0
Ration formulation	1	1	100.0
Pasture improvement/rotation	1	1	100.0
Pregnancy examinations	1	1	100.0
Crossbreeding	1	0	0.0
Bull breeding soundness evaluation	1	1	100.0
Vaccinations	1	1	100.0
Deworming	1	1	100.0
Lice/warble treatment	1	1	100.0
Fly control	1	1	100.0
Postmortem examination	1	0	0.0
Vitamin E-Se injection	1	1	100.0
Growth promotants	1	0	0.0
Early dehorning	1	1	100.0
Polled	1	0	0.0
Early castration	1	0	0.0
Creep feeding	1	0	0.0

Table 70. Averages and Location of Measures of Herd Performance, **Parry Sound** District, Ontario Red Meat II Herd Health Option, 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
Number									
Heifers	1	1	1.0	.	1.0	1.0	1.0	1.0	1.0
Cows	1	37	37.0	.	37.0	37.0	37.0	37.0	37.0
Bulls	1	1	1.0	.	1.0	1.0	1.0	1.0	1.0
Exposed to Mating	1	32	32.0	.	32.0	32.0	32.0	32.0	32.0
Calves Weaned	1	32	32.0	.	32.0	32.0	32.0	32.0	32.0
Length of Calving Season									
Calving Spread (days)	1	141	141.0	.	141.0	141.0	141.0	141.0	141.0
Breeding Success / Removals									
Open Rate	1	0	0.0	.	0.0	0.0	0.0	0.0	0
Removed Rate	1	12	12.0	.	12.0	12.0	12.0	12.0	12.0
Calving Success									
Calving Rate	1	100	100.0	.	100	100	100.0	100.0	100.0
Liveborn Calving Rate	1	97	97.0	.	97	97.0	97.0	97.0	97.0
Stillborn Rate	1	3	3.0	.	3.0	3.0	3.0	3.0	3
Assisted Calving Rate	1	6	6.0	.	6.0	6.0	6.0	6.0	6
Calf Survival and Treatment									
Calf Mortality Rate	0	.	.	.	.	.	.	.	.
Calf Treatment Rate	0	.	.	.	.	.	.	.	.
Productivity									
Weaned Calf Crop Rate	1	0	0.0	.	0	0.0	0.0	0.0	0
Average 200 Day Adjusted Weaning Weight (lbs)	1	100	100.0	.	100.0	100.0	100.0	100.0	100.0
Weight (lbs) Calf Weaned per Cow Exposed	1	663	663.0	.	663.0	663.0	663.0	663.0	663.0

NUMBER = number of herds (groups)
MAX = maximum (largest) observation
AVERAGE = mean
STD = standard deviation
PCTL90 = 90th percentile, PCTL75 = 75th percentile, MEDIAN = 50th percentile,
PCTL25 = 25th percentile, PCTL10 = 10th percentile
all rates are expressed as percentages

Table 71. Herd Management Practices Used by **Peel County** Producers in the Ontario Red Meat II Herd Health Option, in 1989

Management Practice	Number Herds	Number Yes	Percent Yes
Feed analysis	10	2	20.0
Ration formulation	10	2	20.0
Pasture improvement/rotation	10	6	60.0
Pregnancy examinations	10	10	100.0
Crossbreeding	10	5	50.0
Bull breeding soundness evaluation	10	1	10.0
Vaccinations	10	9	90.0
Deworming	10	8	80.0
Lice/warble treatment	10	9	90.0
Fly control	10	5	50.0
Postmortem examination	10	6	60.0
Vitamin E-Se injection	10	9	90.0
Growth promotants	10	3	30.0
Early dehorning	10	7	70.0
Polled	10	0	0.0
Early castration	10	8	80.0
Creep feeding	10	8	80.0

Table 72. Averages and Location of Measures of Herd Performance, **Peel County**, Ontario Red Meat II Herd Health Option, 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
Number									
Heifers	10	10	4.6	3.1	9.0	8.0	3.5	3.0	1.0
Cows	10	55	31.8	14.7	53.5	42.0	31.0	18.0	13.5
Bulls	8	2	1.1	0.8	2.0	2.0	1.0	0.5	0.0
Exposed to Mating	9	52	30.1	13.1	52.0	38.0	29.0	18.0	14.0
Calves Weaned	10	42	28.0	11.2	41.5	40.0	29.0	17.0	13.5
Length of Calving Season									
Calving Spread (days)	9	276	129.2	62.9	276.0	150.0	108.0	106.0	68.0
Breeding Success / Removals									
Open Rate	9	15	4.6	4.6	15.0	6.0	3.0	3.0	0
Removed Rate	9	25	7.9	8.8	25.0	7.0	6.0	3.0	0.0
Calving Success									
Calving Rate	9	110	95.9	8.9	110	100	97.0	93.0	81.0
Liveborn Calving Rate	9	107	92.1	8.9	107	94.0	93.0	91.0	77.0
Stillborn Rate	9	10	3.9	3.1	10.0	5.0	4.0	2.0	0
Assisted Calving Rate	9	19	10.1	5.9	19.0	14.0	8.0	7.0	3
Calf Survival and Treatment									
Calf Mortality Rate	9	12	3.2	4.4	12.0	6.0	0.0	0	0
Calf Treatment Rate	7	100	41.0	42.5	100	100.0	29.0	0.0	0
Productivity									
Weaned Calf Crop Rate	9	107	89.1	8.9	107.0	93.0	90.0	82.0	77.0
Average 200 Day Adjusted Weaning Weight (lbs)	10	755	591.1	84.1	730.5	618.0	574.0	530.0	505.5
Weight (lbs) Calf Weaned per Cow Exposed	9	807	530.0	126.2	807.0	518.0	475.0	472.0	402.0

NUMBER = number of herds (groups)
MAX = maximum (largest) observation
AVERAGE = mean
STD = standard deviation
PCTL90 = 90th percentile, PCTL75 = 75th percentile, MEDIAN = 50th percentile,
PCTL25 = 25th percentile, PCTL10 = 10th percentile
all rates are expressed as percentages

Table 73. Herd Management Practices Used by **Perth County** Producers in the Ontario Red Meat II Herd Health Option, in 1989

Management Practice	Number Herds	Number Yes	Percent Yes
Feed analysis	27	8	29.6
Ration formulation	27	8	29.6
Pasture improvement/rotation	27	21	77.8
Pregnancy examinations	27	21	77.8
Crossbreeding	27	16	59.3
Bull breeding soundness evaluation	27	5	18.5
Vaccinations	27	22	81.5
Deworming	27	24	88.9
Lice/warble treatment	27	25	92.6
Fly control	27	21	77.8
Postmortem examination	27	8	29.6
Vitamin E-Se injection	27	23	85.2
Growth promotants	27	7	25.9
Early dehorning	27	17	63.0
Polled	27	4	14.8
Early castration	27	16	59.3
Creep feeding	27	14	51.9

Table 74. Averages and Location of Measures of Herd Performance, **Perth County**, Ontario Red Meat II Herd Health Option, 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
Number									
Heifers	24	36	10.3	8.9	22.0	12.5	8.0	3.5	2.0
Cows	25	86	39.6	19.8	61.0	57.0	37.0	21.0	15.0
Bulls	24	7	1.7	1.5	3.0	2.0	1.0	1.0	0.0
Exposed to Mating	27	90	43.7	22.8	80.0	57.0	37.0	22.0	18.0
Calves Weaned	27	83	38.3	18.0	60.0	54.0	35.0	22.0	17.0
Length of Calving Season									
Calving Spread (days)	26	360	186.8	97.8	330.0	262.0	176.5	113.0	63.0
Breeding Success / Removals									
Open Rate	27	29	3.8	5.7	7.0	5.0	3.0	0.0	0
Removed Rate	27	47	14.8	12.6	39.0	17.0	12.0	7.0	0.0
Calving Success									
Calving Rate	27	114	97.0	9.7	104	102	100.0	95.0	86.0
Liveborn Calving Rate	27	106	94.1	10.3	104	100.0	98.0	88.0	82.0
Stillborn Rate	27	12	3.2	3.9	10.0	7.0	1.0	0.0	0
Assisted Calving Rate	26	85	13.5	17.3	32.0	17.0	9.0	3.0	0
Calf Survival and Treatment									
Calf Mortality Rate	27	26	3.9	6.2	11.0	6.0	0.0	0	0
Calf Treatment Rate	25	100	22.0	26.9	72	26.0	14.0	5.0	0
Productivity									
Weaned Calf Crop Rate	27	105	90.3	10.4	100.0	100.0	92.0	85.0	74.0
Average 200 Day Adjusted Weaning Weight (lbs)	27	686	529.9	70.0	640.0	573.0	533.0	507.0	431.0
Weight (lbs) Calf Weaned per Cow Exposed	27	611	476.0	73.4	595.0	539.0	474.0	413.0	369.0

NUMBER = number of herds (groups)
MAX = maximum (largest) observation
AVERAGE = mean
STD = standard deviation
PCTL90 = 90th percentile, PCTL75 = 75th percentile, MEDIAN = 50th percentile,
PCTL25 = 25th percentile, PCTL10 = 10th percentile
all rates are expressed as percentages

Table 75. Herd Management Practices Used by **Peterborough County** Producers in the Ontario Red Meat II Herd Health Option, in 1989

Management Practice	Number Herds	Number Yes	Percent Yes
Feed analysis	65	16	24.6
Ration formulation	65	8	12.3
Pasture improvement/rotation	65	48	73.8
Pregnancy examinations	65	48	73.8
Crossbreeding	65	49	75.4
Bull breeding soundness evaluation	65	21	32.3
Vaccinations	65	56	86.2
Deworming	65	49	75.4
Lice/warble treatment	65	64	98.5
Fly control	65	48	73.8
Postmortem examination	65	23	35.4
Vitamin E-Se injection	65	61	93.8
Growth promotants	65	16	24.6
Early dehorning	65	48	73.8
Polled	65	4	6.2
Early castration	65	54	83.1
Creep feeding	65	40	61.5

Table 76. Averages and Location of Measures of Herd Performance, **Peterborough County**, Ontario Red Meat II Herd Health Option, 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
Number									
Heifers	63	35	7.9	7.1	18.0	10.0	6.0	3.0	2.0
Cows	63	140	42.2	28.5	83.0	52.0	32.0	22.0	15.0
Bulls	63	25	2.0	3.3	4.0	2.0	1.0	1.0	0.0
Exposed to Mating	64	148	45.2	32.4	100.0	56.5	31.5	24.0	16.0
Calves Weaned	64	140	39.6	28.4	77.0	50.5	28.0	22.5	14.0
Length of Calving Season									
Calving Spread (days)	62	364	158.8	89.6	287.0	242.0	136.0	88.0	59.0
Breeding Success / Removals									
Open Rate	64	31	4.8	5.7	11.0	8.0	4.0	0.0	0
Removed Rate	62	59	13.2	10.8	25.0	21.0	11.5	6.0	0.0
Calving Success									
Calving Rate	64	116	95.6	7.9	102	100	96.5	92.5	88.0
Liveborn Calving Rate	64	116	92.5	8.7	100	97.0	93.5	89.0	83.0
Stillborn Rate	64	14	3.3	3.1	8.0	5.5	3.0	0.0	0
Assisted Calving Rate	63	32	9.5	8.1	19.0	15.0	8.0	4.0	0
Calf Survival and Treatment									
Calf Mortality Rate	64	33	4.5	6.1	12.0	7.0	2.0	0	0
Calf Treatment Rate	63	100	18.2	26.1	51	21.0	8.0	5.0	0
Productivity									
Weaned Calf Crop Rate	64	116	88.3	9.9	99.0	93.0	89.0	84.5	77.0
Average 200 Day Adjusted Weaning Weight (lbs)	63	801	561.0	69.2	630.0	607.0	560.0	519.0	480.0
Weight (lbs) Calf Weaned per Cow Exposed	63	785	497.1	97.8	598.0	557.0	494.0	425.0	384.0

NUMBER = number of herds (groups)
MAX = maximum (largest) observation
AVERAGE = mean
STD = standard deviation
PCTL90 = 90th percentile, **PCTL75** = 75th percentile, **MEDIAN** = 50th percentile,
PCTL25 = 25th percentile, **PCTL10** = 10th percentile
all rates are expressed as percentages

Table 77. Herd Management Practices Used by **Prescott County** Producers in the Ontario Red Meat II Herd Health Option, in 1989

Management Practice	Number Herds	Number Yes	Percent Yes
Feed analysis	14	4	28.6
Ration formulation	14	4	28.6
Pasture improvement/rotation	14	11	78.6
Pregnancy examinations	14	10	71.4
Crossbreeding	14	10	71.4
Bull breeding soundness evaluation	14	6	42.9
Vaccinations	14	12	85.7
Deworming	14	14	100.0
Lice/warble treatment	14	14	100.0
Fly control	14	11	78.6
Postmortem examination	14	3	21.4
Vitamin E-Se injection	14	9	64.3
Growth promotants	14	2	14.3
Early dehorning	14	8	57.1
Polled	14	0	0.0
Early castration	14	10	71.4
Creep feeding	14	8	57.1

Table 78. Averages and Location of Measures of Herd Performance, **Prescott County**, Ontario Red Meat II Herd Health Option, 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
Number									
Heifers	11	75	14.4	21.2	21.0	15.0	10.0	0.0	0.0
Cows	12	409	77.0	110.0	130.0	80.0	32.0	26.0	18.0
Bulls	12	20	3.2	5.4	5.0	2.5	1.0	1.0	1.0
Exposed to Mating	14	521	76.7	131.8	130.0	57.0	35.5	25.0	14.0
Calves Weaned	14	423	65.7	106.6	113.0	54.0	31.0	25.0	12.0
Length of Calving Season									
Calving Spread (days)	12	295	113.7	79.9	257.0	121.5	86.5	65.0	56.0
Breeding Success / Removals									
Open Rate	14	11	3.9	3.6	8.0	6.0	3.5	0.0	0
Removed Rate	13	22	10.2	7.4	19.0	14.0	11.0	6.0	0.0
Calving Success									
Calving Rate	14	100	95.1	4.4	100	100	94.5	92.0	89.0
Liveborn Calving Rate	14	100	91.5	6.2	100	95.0	92.0	89.0	83.0
Stillborn Rate	14	14	3.9	5.1	14.0	6.0	2.0	0.0	0
Assisted Calving Rate	14	22	10.9	5.9	18.0	16.0	10.5	6.0	6
Calf Survival and Treatment									
Calf Mortality Rate	11	24	3.4	7.3	8.0	3.0	0.0	0	0
Calf Treatment Rate	14	94	18.8	25.1	39	32.0	9.0	4.0	0
Productivity									
Weaned Calf Crop Rate	14	100	90.1	9.5	100.0	100.0	92.0	86.0	77.0
Average 200 Day Adjusted Weaning Weight (lbs)	14	586	509.2	51.6	560.0	552.0	510.5	481.0	458.0
Weight (lbs) Calf Weaned per Cow Exposed	14	528	457.1	50.5	500.0	500.0	468.5	425.0	389.0

NUMBER = number of herds (groups)
MAX = maximum (largest) observation
AVERAGE = mean
STD = standard deviation
PCTL90 = 90th percentile, PCTL75 = 75th percentile, MEDIAN = 50th percentile,
PCTL25 = 25th percentile, PCTL10 = 10th percentile
all rates are expressed as percentages

Table 79. Herd Management Practices Used by **Prince Edward County** Producers in the Ontario Red Meat II Herd Health Option, in 1989

Management Practice	Number Herds	Number Yes	Percent Yes
Feed analysis	8	3	37.5
Ration formulation	8	4	50.0
Pasture improvement/rotation	8	5	62.5
Pregnancy examinations	8	6	75.0
Crossbreeding	8	5	62.5
Bull breeding soundness evaluation	8	3	37.5
Vaccinations	8	7	87.5
Deworming	8	5	62.5
Lice/warble treatment	8	7	87.5
Fly control	8	6	75.0
Postmortem examination	8	2	25.0
Vitamin E-Se injection	8	7	87.5
Growth promotants	8	1	12.5
Early dehorning	8	4	50.0
Polled	8	0	0.0
Early castration	8	4	50.0
Creep feeding	8	7	87.5

Table 80. Averages and Location of Measures of Herd Performance, Prince Edward County, Ontario Red Meat II Herd Health Option, 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
Number									
Heifers	8	14	7.3	4.5	14.0	11.0	6.0	4.0	2.0
Cows	8	43	28.4	7.7	43.0	32.0	27.0	24.5	17.0
Bulls	7	2	1.4	0.8	2.0	2.0	2.0	1.0	0.0
Exposed to Mating	8	56	33.6	10.9	56.0	38.5	30.0	26.5	23.0
Calves Weaned	7	43	29.3	9.5	43.0	42.0	26.0	22.0	19.0
Length of Calving Season									
Calving Spread (days)	8	273	141.5	67.6	273.0	177.5	132.5	83.5	72.0
Breeding Success / Removals									
Open Rate	8	22	6.6	7.9	22.0	11.0	4.5	0.0	0
Removed Rate	7	31	13.3	10.2	31.0	21.0	13.0	7.0	0.0
Calving Success									
Calving Rate	8	100	90.4	9.5	100	100	90.5	82.5	77.0
Liveborn Calving Rate	8	100	88.5	11.7	100	100.0	88.5	81.0	69.0
Stillborn Rate	8	12	2.3	4.2	12.0	3.0	0.0	0.0	0
Assisted Calving Rate	8	25	9.3	10.8	25.0	20.0	4.5	0.0	0
Calf Survival and Treatment									
Calf Mortality Rate	6	5	0.8	2.0	5.0	0.0	0.0	0	0
Calf Treatment Rate	8	100	25.1	31.9	100	27.0	13.0	8.5	4
Productivity									
Weaned Calf Crop Rate	7	100	88.6	12.9	100.0	100.0	93.0	75.0	69.0
Average 200 Day Adjusted Weaning Weight (lbs)	7	638	548.1	53.9	638.0	589.0	524.0	497.0	495.0
Weight (lbs) Calf Weaned per Cow Exposed	7	638	487.7	104.6	638.0	589.0	476.0	373.0	356.0

NUMBER = number of herds (groups)
MAX = maximum (largest) observation
AVERAGE = mean
STD = standard deviation
PCTL90 = 90th percentile, PCTL75 = 75th percentile, MEDIAN = 50th percentile,
PCTL25 = 25th percentile, PCTL10 = 10th percentile
all rates are expressed as percentages

Table 81. Herd Management Practices Used by **Rainy River District** Producers in the Ontario Red Meat II Herd Health Option, in 1989

Management Practice	Number Herds	Number Yes	Percent Yes
Feed analysis	8	3	37.5
Ration formulation	8	0	0.0
Pasture improvement/rotation	8	4	50.0
Pregnancy examinations	8	7	87.5
Crossbreeding	8	6	75.0
Bull breeding soundness evaluation	8	2	25.0
Vaccinations	8	7	87.5
Deworming	8	8	100.0
Lice/warble treatment	8	8	100.0
Fly control	8	6	75.0
Postmortem examination	8	3	37.5
Vitamin E-Se injection	8	5	62.5
Growth promotants	8	2	25.0
Early dehorning	8	6	75.0
Polled	8	1	12.5
Early castration	8	7	87.5
Creep feeding	8	2	25.0

Table 82. Averages and Location of Measures of Herd Performance, **Rainy River** District, Ontario Red Meat II Herd Health Option, in 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
Number									
Heifers	7	33	18.6	10.9	33.0	28.0	18.0	8.0	6.0
Cows	7	114	62.0	28.5	114.0	72.0	59.0	34.0	28.0
Bulls	7	4	2.7	0.7	4.0	3.0	3.0	2.0	2.0
Exposed to Mating	8	145	76.7	39.3	145.0	101.5	70.5	47.0	31.0
Calves Weaned	8	130	65.0	33.4	130.0	79.0	60.5	42.0	27.0
Length of Calving Season									
Calving Spread (days)	7	155	107.8	34.6	155.0	148.0	107.0	78.0	70.0
Breeding Success / Removals									
Open Rate	8	25	7.4	7.8	25.0	8.5	5.0	3.5	0
Removed Rate	8	20	11.5	6.1	20.0	17.0	10.5	7.0	3.0
Calving Success									
Calving Rate	8	101	90.6	7.9	101	97	90.5	85.5	78.0
Liveborn Calving Rate	8	92	86.8	5.2	92	91.0	88.0	83.5	77.0
Stillborn Rate	8	10	4.3	3.8	10.0	7.5	4.0	0.5	0
Assisted Calving Rate	8	32	11.9	9.7	32.0	16.5	8.5	5.0	3
Calf Survival and Treatment									
Calf Mortality Rate	8	6	1.5	2.7	6.0	3.0	0.0	0	0
Calf Treatment Rate	7	100	28.9	35.3	100	45.0	20.0	2.0	2
Productivity									
Weaned Calf Crop Rate	8	92	85.5	4.9	92.0	88.5	86.5	82.5	77.0
Average 200 Day Adjusted Weaning Weight (lbs)	8	627	570.9	35.2	627.0	596.0	567.0	541.0	532.0
Weight (lbs) Calf Weaned per Cow Exposed	8	526	485.5	25.4	526.0	500.5	490.0	463.0	451.0

NUMBER = number of herds (groups)
MAX = maximum (largest) observation
AVERAGE = mean
STD = standard deviation
PCTL90 = 90th percentile, PCTL75 = 75th percentile, MEDIAN = 50th percentile,
PCTL25 = 25th percentile, PCTL10 = 10th percentile
all rates are expressed as percentages

Table 83. Herd Management Practices Used by **Renfrew County** Producers in the Ontario Red Meat II Herd Health Option, in 1989

Management Practice	Number Herds	Number Yes	Percent Yes
Feed analysis	130	27	20.8
Ration formulation	130	16	12.32
Pasture improvement/rotation	130	94	72.3
Pregnancy examinations	130	80	61.5
Crossbreeding	130	108	83.1
Bull breeding soundness evaluation	130	28	21.5
Vaccinations	130	112	86.2
Deworming	130	112	86.2
Lice/warble treatment	130	121	93.1
Fly control	130	100	76.9
Postmortem examination	130	63	48.5
Vitamin E-Se injection	130	120	92.3
Growth promotants	130	37	28.5
Early dehorning	130	75	57.7
Polled	130	6	4.6
Early castration	130	103	79.2
Creep feeding	130	49	37.7

Table 84. Averages and Location of Measures of Herd Performance, **Renfrew County**, Ontario Red Meat II Herd Health Option, 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
Number									
Heifers	124	46	10.0	8.8	21.0	13.0	7.0	5.0	2.0
Cows	130	240	49.5	40.6	99.5	63.0	40.0	24.0	14.0
Bulls	126	18	2.2	2.2	4.0	3.0	2.0	1.0	1.0
Exposed to Mating	126	238	53.2	41.6	109.0	68.0	42.5	24.0	17.0
Calves Weaned	126	215	46.5	36.3	93.0	56.0	35.5	22.0	14.0
Length of Calving Season									
Calving Spread (days)	122	364	130.7	68.8	232.0	187.0	113.0	74.0	56.0
Breeding Success / Removals									
Open Rate	126	28	4.1	5.2	10.0	6.0	3.0	0.0	0
Removed Rate	126	58	11.9	9.2	23.0	17.0	10.0	6.0	0.0
Calving Success									
Calving Rate	126	114	95.3	8.4	102	100	97.0	92.0	86.0
Liveborn Calving Rate	126	108	91.8	9.3	100	98.0	93.5	88.0	81.0
Stillborn Rate	126	33	3.8	4.9	11.0	6.0	2.0	0.0	0
Assisted Calving Rate	125	40	9.2	8.0	20.0	12.0	8.0	4.0	0
Calf Survival and Treatment									
Calf Mortality Rate	121	24	4.1	5.4	11.0	7.0	2.0	0	0
Calf Treatment Rate	121	104	19.5	27.5	53	23.0	9.0	0.0	0
Productivity									
Weaned Calf Crop Rate	126	108	88.3	10.4	100.0	95.0	90.0	83.0	76.0
Average 200 Day Adjusted Weaning Weight (lbs)	126	750	537.7	63.2	610.0	577.0	542.0	502.0	451.0
Weight (lbs) Calf Weaned per Cow Exposed	126	750	474.7	77.7	566.0	526.0	473.0	433.0	386.0

NUMBER = number of herds (groups)
MAX = maximum (largest) observation
AVERAGE = mean
STD = standard deviation
PCTL90 = 90th percentile, PCTL75 = 75th percentile, MEDIAN = 50th percentile,
PCTL25 = 25th percentile, PCTL10 = 10th percentile
all rates are expressed as percentages

Table 85. Herd Management Practices Used by **Russell County** Producers in the Ontario Red Meat II Herd Health Option, in 1989

Management Practice	Number Herds	Number Yes	Percent Yes
Feed analysis	3	1	33.3
Ration formulation	3	1	33.3
Pasture improvement/rotation	3	3	100.0
Pregnancy examinations	3	3	100.0
Crossbreeding	3	3	100.0
Bull breeding soundness evaluation	3	1	33.3
Vaccinations	3	3	100.0
Deworming	3	3	100.0
Lice/warble treatment	3	3	100.0
Fly control	3	1	33.3
Postmortem examination	3	0	0.0
Vitamin E-Se injection	3	3	100.0
Growth promotants	3	0	0.0
Early dehorning	3	2	66.7
Polled	3	1	33.3
Early castration	3	2	66.7
Creep feeding	3	2	66.7

Table 86. Averages and Location of Measures of Herd Performance, **Russell County**, Ontario Red Meat II Herd Health Option, 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
Number									
Heifers	3	15	11.0	5.3	15.0	15.0	13.0	5.0	5.0
Cows	3	42	30.3	10.7	42.0	42.0	28.0	21.0	21.0
Bulls	3	2	1.7	0.6	2.0	2.0	2.0	1.0	1.0
Exposed to Mating	3	44	35.3	9.0	44.0	44.0	36.0	26.0	26.0
Calves Weaned	3	40	31.0	10.1	40.0	40.0	33.0	20.0	20.0
Length of Calving Season									
Calving Spread (days)	3	250	145.0	93.0	250.0	250.0	112.0	73.0	73.0
Breeding Success / Removals									
Open Rate	3	5	2.7	2.5	5.0	5.0	3.0	0.0	0
Removed Rate	3	15	8.3	6.5	15.0	15.0	8.0	2.0	2.0
Calving Success									
Calving Rate	3	100	97.3	2.5	100	100	97.0	95.0	95.0
Liveborn Calving Rate	3	92	91.7	0.6	92	92.0	92.0	91.0	91.0
Stillborn Rate	3	8	6.3	1.5	8.0	8.0	6.0	5.0	5
Assisted Calving Rate	3	14	9.3	5.0	14.0	14.0	10.0	4.0	4
Calf Survival and Treatment									
Calf Mortality Rate	3	17	5.7	9.8	17.0	17.0	0.0	0	0
Calf Treatment Rate	2	0	0.0	0.0	0	0.0	0.0	0.0	0
Productivity									
Weaned Calf Crop Rate	3	92	86.7	8.4	92.0	92.0	91.0	77.0	77.0
Average 200 Day Adjusted Weaning Weight (lbs)	3	589	547.0	54.8	589.0	589.0	567.0	485.0	485.0
Weight (lbs) Calf Weaned per Cow Exposed	3	535	476.0	89.5	535.0	535.0	520.0	373.0	373.0

NUMBER = number of herds (groups)
MAX = maximum (largest) observation
AVERAGE = mean
STD = standard deviation
PCTL90 = 90th percentile, PCTL75 = 75th percentile, MEDIAN = 50th percentile,
PCTL25 = 25th percentile, PCTL10 = 10th percentile
all rates are expressed as percentages

Table 87. Herd Management Practices Used by **Simcoe County** Producers in the Ontario Red Meat II Herd Health Option, in 1989

Management Practice	Number Herds	Number Yes	Percent Yes
Feed analysis	44	20	45.5
Ration formulation	44	14	31.8
Pasture improvement/rotation	44	31	70.5
Pregnancy examinations	44	38	86.4
Crossbreeding	44	27	61.4
Bull breeding soundness evaluation	44	10	22.7
Vaccinations	44	39	88.6
Deworming	44	43	97.7
Lice/warble treatment	44	44	100.0
Fly control	44	37	84.1
Postmortem examination	44	21	47.7
Vitamin E-Se injection	44	40	90.9
Growth promotants	44	16	36.4
Early dehorning	44	22	50.0
Polled	44	2	4.5
Early castration	44	29	65.9
Creep feeding	44	29	65.9

Table 88. Averages and Location of Measures of Herd Performance, Simcoe County, Ontario Red Meat II Herd Health Option, 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
Number									
Heifers	42	25	8.0	6.3	16.0	11.0	7.0	4.0	0.0
Cows	43	113	40.3	26.4	83.0	52.0	33.0	21.0	12.0
Bulls	43	7	1.7	1.2	3.0	2.0	2.0	1.0	1.0
Exposed to Mating	44	175	46.9	34.5	92.0	58.0	39.5	22.5	14.0
Calves Weaned	44	167	42.8	32.5	87.0	51.5	34.0	20.0	13.0
Length of Calving Season									
Calving Spread (days)	44	364	131.0	85.1	280.0	162.0	99.5	73.5	56.0
Breeding Success / Removals									
Open Rate	44	21	3.4	4.6	8.0	5.0	2.0	0.0	0
Removed Rate	42	29	9.7	7.5	21.0	12.0	9.0	5.0	2.0
Calving Success									
Calving Rate	44	135	96.7	10.4	104	100	98.0	94.5	86.0
Liveborn Calving Rate	44	130	93.9	10.0	101	100.0	95.0	90.5	86.0
Stillborn Rate	44	12	2.8	3.5	9.0	4.5	2.0	0.0	0
Assisted Calving Rate	43	27	7.5	7.3	17.0	11.0	6.0	2.0	0
Calf Survival and Treatment									
Calf Mortality Rate	43	12	2.9	3.3	8.0	5.0	2.0	0	0
Calf Treatment Rate	40	100	19.8	29.9	75	21.5	8.0	1.0	0
Productivity									
Weaned Calf Crop Rate	44	122	91.3	9.4	100.0	95.5	92.0	87.5	80.0
Average 200 Day Adjusted Weaning Weight (lbs)	44	773	557.9	79.4	640.0	584.5	553.5	517.5	468.0
Weight (lbs) Calf Weaned per Cow Exposed	44	677	508.2	82.4	631.0	554.0	506.0	454.5	386.0

NUMBER = number of herds (groups)
MAX = maximum (largest) observation
AVERAGE = mean
STD = standard deviation
PCTL90 = 90th percentile, PCTL75 = 75th percentile, MEDIAN = 50th percentile,
PCTL25 = 25th percentile, PCTL10 = 10th percentile
all rates are expressed as percentages

Table 89. Herd Management Practices Used by **Stormont County** Producers in the Ontario Red Meat II Herd Health Option, in 1989

Management Practice	Number Herds	Number Yes	Percent Yes
Feed analysis	5	1	20.0
Ration formulation	5	1	20.0
Pasture improvement/rotation	5	3	60.0
Pregnancy examinations	5	3	60.0
Crossbreeding	5	4	80.0
Bull breeding soundness evaluation	5	0	0.0
Vaccinations	5	1	20.0
Deworming	5	5	100.0
Lice/warble treatment	5	4	80.0
Fly control	5	4	80.0
Postmortem examination	5	2	40.0
Vitamin E-Se injection	5	4	80.0
Growth promotants	5	1	20.0
Early dehorning	5	1	20.0
Polled	5	1	20.0
Early castration	5	4	80.0
Creep feeding	5	3	60.0

Table 90. Averages and Location of Measures of Herd Performance, **Stormont** County, Ontario Red Meat II Herd Health Option, 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
Number									
Heifers	5	6	5.2	0.8	6.0	6.0	5.0	5.0	4.0
Cows	5	42	23.4	11.3	42.0	26.0	18.0	17.0	14.0
Bulls	5	2	1.0	0.7	2.0	1.0	1.0	1.0	0.0
Exposed to Mating	5	41	24.4	11.1	41.0	30.0	20.0	17.0	14.0
Calves Weaned	5	41	26.4	9.8	41.0	30.0	26.0	18.0	17.0
Length of Calving Season									
Calving Spread (days)	5	195	139.2	52.9	195.0	186.0	139.0	106.0	70.0
Breeding Success / Removals									
Open Rate	5	0	0.0	0.0	0.0	0.0	0.0	0.0	0
Removed Rate	5	17	11.8	3.7	17.0	13.0	12.0	10.0	7.0
Calving Success									
Calving Rate	5	129	105.8	12.9	129	100	100.0	100.0	100.0
Liveborn Calving Rate	5	112	96.6	11.3	112	100.0	100.0	86.0	85.0
Stillborn Rate	5	18	9.4	8.7	18.0	15.0	14.0	0.0	0
Assisted Calving Rate	5	14	11.0	3.2	14.0	13.0	12.0	10.0	6
Calf Survival and Treatment									
Calf Mortality Rate	3	11	3.7	6.4	11.0	11.0	0.0	0	0
Calf Treatment Rate	5	58	16.2	23.9	58	11.0	10.0	2.0	0
Productivity									
Weaned Calf Crop Rate	5	186	115.2	39.8	186.0	100.0	100.0	100.0	90.0
Average 200 Day Adjusted Weaning Weight (lbs)	5	678	603.0	73.4	678.0	670.0	609.0	544.0	514.0
Weight (lbs) Calf Weaned per Cow Exposed	5	1259	708.4	316.2	1259.0	670.0	609.0	514.0	490.0

NUMBER = number of herds (groups)
MAX = maximum (largest) observation
AVERAGE = mean
STD = standard deviation
PCTL90 = 90th percentile, PCTL75 = 75th percentile, MEDIAN = 50th percentile,
PCTL25 = 25th percentile, PCTL10 = 10th percentile
all rates are expressed as percentages

Table 91. Herd Management Practices Used by **Sudbury District** Producers in the Ontario Red Meat II Herd Health Option, in 1989

Management Practice	Number Herds	Number Yes	Percent Yes
Feed analysis	17	7	41.2
Ration formulation	17	5	29.4
Pasture improvement/rotation	17	16	94.1
Pregnancy examinations	17	11	64.7
Crossbreeding	17	13	76.5
Bull breeding soundness evaluation	17	8	47.1
Vaccinations	17	12	70.6
Deworming	17	14	82.4
Lice/warble treatment	17	17	100.0
Fly control	17	10	58.8
Postmortem examination	17	8	47.1
Vitamin E-Se injection	17	17	100.0
Growth promotants	17	0	0.0
Early dehorning	17	13	76.5
Polled	17	0	0.0
Early castration	17	12	70.6
Creep feeding	17	10	58.8

Table 92. Averages and Location of Measures of Herd Performance, Sudbury District, Ontario Red Meat II Herd Health Option, 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
Number									
Heifers	17	15	6.4	4.4	15.0	9.0	6.0	3.0	0.0
Cows	17	57	28.6	11.7	44.0	35.0	28.0	21.0	14.0
Bulls	17	3	1.2	0.5	2.0	1.0	1.0	1.0	1.0
Exposed to Mating	17	85	33.8	15.8	44.0	40.0	33.0	27.0	17.0
Calves Weaned	17	69	28.1	13.2	38.0	31.0	28.0	19.0	15.0
Length of Calving Season									
Calving Spread (days)	17	332	131.7	90.6	285.0	162.0	103.0	61.0	42.0
Breeding Success / Removals									
Open Rate	17	14	2.1	4.0	9.0	2.0	0.0	0.0	0
Removed Rate	17	32	12.6	10.4	30.0	18.0	11.0	6.0	0.0
Calving Success									
Calving Rate	17	103	93.2	10.3	100	100	98.0	91.0	70.0
Liveborn Calving Rate	17	100	88.9	9.6	100	95.0	91.0	84.0	68.0
Stillborn Rate	17	21	4.7	5.9	15.0	6.0	3.0	0.0	0
Assisted Calving Rate	17	42	11.0	12.4	36.0	11.0	6.0	5.0	0
Calf Survival and Treatment									
Calf Mortality Rate	17	23	5.8	7.9	17.0	11.0	0.0	0	0
Calf Treatment Rate	17	38	8.4	11.8	30	14.0	3.0	0.0	0
Productivity									
Weaned Calf Crop Rate	17	100	83.5	10.5	95.0	92.0	84.0	74.0	68.0
Average 200 Day Adjusted Weaning Weight (lbs)	17	644	558.5	41.5	635.0	581.0	543.0	528.0	513.0
Weight (lbs) Calf Weaned per Cow Exposed	17	548	466.4	64.6	544.0	525.0	477.0	424.0	358.0

NUMBER = number of herds (groups)
MAX = maximum (largest) observation
AVERAGE = mean
STD = standard deviation
PCTL90 = 90th percentile, PCTL75 = 75th percentile, MEDIAN = 50th percentile,
PCTL25 = 25th percentile, PCTL10 = 10th percentile
all rates are expressed as percentages

Table 93. Herd Management Practices Used by **Thunder Bay District** Producers in the Ontario Red Meat II Herd Health Option, in 1989

Management Practice	Number Herds	Number Yes	Percent Yes
Feed analysis	2	2	100.0
Ration formulation	2	1	50.0
Pasture improvement/rotation	2	2	100.0
Pregnancy examinations	2	2	100.0
Crossbreeding	2	0	0.0
Bull breeding soundness evaluation	2	0	0.0
Vaccinations	2	2	100.0
Deworming	2	2	100.0
Lice/warble treatment	2	2	100.0
Fly control	2	2	100.0
Postmortem examination	2	1	50.0
Vitamin E-Se injection	2	1	50.0
Growth promotants	2	0	0.0
Early dehorning	2	1	50.0
Polled	2	0	0.0
Early castration	2	1	50.0
Creep feeding	2	0	0.0

Table 94. Averages and Location of Measures of Herd Performance, Thunder Bay District, Ontario Red Meat II Herd Health Option, 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
Number									
Heifers	2	18	10.5	10.6	18.0	18.0	10.5	3.0	3.0
Cows	2	60	39.5	28.9	60.0	60.0	39.5	19.0	19.0
Bulls	2	9	4.5	6.4	9.0	9.0	4.5	0.0	0.0
Exposed to Mating	2	61	42.5	26.2	61.0	61.0	42.5	24.0	24.0
Calves Weaned	2	58	39.0	26.9	58.0	58.0	39.0	20.0	20.0
Length of Calving Season									
Calving Spread (days)	2	162	136.5	36.1	162.0	162.0	136.5	111.0	111.0
Breeding Success / Removals									
Open Rate	2	8	5.5	3.5	8.0	8.0	5.5	3.0	3
Removed Rate	2	41	29.0	16.9	41.0	41.0	29.0	17.0	17.0
Calving Success									
Calving Rate	2	97	90.0	9.9	97	97	90.0	83.0	83.0
Liveborn Calving Rate	2	97	90.0	9.9	97	97.0	90.0	83.0	83.0
Stillborn Rate	2	0	0.0	0.0	0.0	0.0	0.0	0.0	0
Assisted Calving Rate	2	5	4.0	1.4	5.0	5.0	4.0	3.0	3
Calf Survival and Treatment									
Calf Mortality Rate	2	2	1.0	1.4	2.0	2.0	1.0	0	0
Calf Treatment Rate	2	42	33.5	12.0	42	42.0	33.5	25.0	25
Productivity									
Weaned Calf Crop Rate	2	95	89.0	8.5	95.0	95.0	89.0	83.0	83.0
Average 200 Day Adjusted Weaning Weight (lbs)	2	786	636.0	212.1	786.0	786.0	636.0	486.0	486.0
Weight (lbs) Calf Weaned per Cow Exposed	2	655	558.5	136.5	655.0	655.0	558.5	462.0	462.0

NUMBER = number of herds (groups)
MAX = maximum (largest) observation
AVERAGE = mean
STD = standard deviation
PCTL90 = 90th percentile, PCTL75 = 75th percentile, MEDIAN = 50th percentile,
PCTL25 = 25th percentile, PCTL10 = 10th percentile
all rates are expressed as percentages

Table 95. Herd Management Practices Used by **Timiskaming** County Producers in the Ontario Red Meat II Herd Health Option, in 1989

Management Practice	Number Herds	Number Yes	Percent Yes
Feed analysis	15	8	53.3
Ration formulation	15	8	53.3
Pasture improvement/rotation	15	11	73.3
Pregnancy examinations	15	12	80.0
Crossbreeding	15	9	60.0
Bull breeding soundness evaluation	15	4	26.7
Vaccinations	15	14	93.3
Deworming	15	14	93.3
Lice/warble treatment	15	15	100.0
Fly control	15	13	86.7
Postmortem examination	15	12	80.0
Vitamin E-Se injection	15	14	93.3
Growth promotants	15	5	33.3
Early dehorning	15	9	60.0
Polled	15	2	13.3
Early castration	15	7	46.7
Creep feeding	15	8	53.3

Table 96. Averages and Location of Measures of Herd Performance, **Timiskaming County**, Ontario Red Meat II Herd Health Option, 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
Number									
Heifers	15	33	12.3	8.4	22.0	18.0	10.0	7.0	4.0
Cows	14	108	41.2	25.5	77.0	46.0	38.5	26.0	12.0
Bulls	15	5	2.1	1.1	3.0	3.0	2.0	1.0	1.0
Exposed to Mating	15	155	49.0	35.2	89.0	58.0	43.0	30.0	14.0
Calves Weaned	15	110	41.0	25.4	82.0	46.0	40.0	29.0	14.0
Length of Calving Season									
Calving Spread (days)	15	235	116.3	44.1	155.0	147.0	107.0	89.0	80.0
Breeding Success / Removals									
Open Rate	15	14	3.4	4.0	7.0	7.0	2.0	0.0	0
Removed Rate	15	25	10.8	8.1	22.0	19.0	7.0	4.0	2.0
Calving Success									
Calving Rate	15	107	95.1	7.9	100	100	97.0	93.0	81.0
Liveborn Calving Rate	15	107	92.9	9.6	100	98.0	96.0	90.0	80.0
Stillborn Rate	15	11	2.4	3.4	8.0	4.0	1.0	0.0	0
Assisted Calving Rate	15	46	11.5	11.6	23.0	16.0	9.0	4.0	2
Calf Survival and Treatment									
Calf Mortality Rate	15	21	5.7	7.1	17.0	11.0	2.0	0	0
Calf Treatment Rate	15	100	25.3	26.7	74	26.0	17.0	11.0	5
Productivity									
Weaned Calf Crop Rate	15	100	87.6	10.9	100.0	97.0	90.0	79.0	71.0
Average 200 Day Adjusted Weaning Weight (lbs)	14	716	571.3	71.8	661.0	621.0	567.5	512.0	476.0
Weight (lbs) Calf Weaned per Cow Exposed	14	630	496.7	91.6	621.0	561.0	495.5	419.0	403.0

NUMBER = number of herds (groups)
MAX = maximum (largest) observation
AVERAGE = mean
STD = standard deviation
PCTL90 = 90th percentile, PCTL75 = 75th percentile, MEDIAN = 50th percentile,
PCTL25 = 25th percentile, PCTL10 = 10th percentile
all rates are expressed as percentages

Table 97. Herd Management Practices Used by **Victoria County** Producers in the Ontario Red Meat II Herd Health Option, in 1989

Management Practice	Number Herds	Number Yes	Percent Yes
Feed analysis	73	17	23.3
Ration formulation	73	10	13.7
Pasture improvement/rotation	73	52	71.2
Pregnancy examinations	73	64	87.7
Crossbreeding	73	54	74.0
Bull breeding soundness evaluation	73	20	27.4
Vaccinations	73	60	82.2
Deworming	73	59	80.8
Lice/warble treatment	73	69	94.5
Fly control	73	49	67.1
Postmortem examination	73	36	49.3
Vitamin E-Se injection	73	71	97.3
Growth promotants	73	27	37.0
Early dehorning	73	37	50.7
Polled	73	7	9.6
Early castration	73	46	63.0
Creep feeding	73	36	49.3

Table 98. Averages and Location of Measures of Herd Performance, Victoria County, Ontario Red Meat II Herd Health Option, 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
Number									
Heifers	70	34	6.6	6.9	16.5	9.0	5.0	2.0	0.0
Cows	71	128	34.7	23.6	70.0	42.0	28.0	19.0	13.0
Bulls	68	20	1.9	2.5	3.0	2.0	1.0	1.0	1.0
Exposed to Mating	71	137	35.9	25.2	69.0	42.0	29.0	19.0	14.0
Calves Weaned	71	128	32.5	22.8	58.0	38.0	27.0	17.0	13.0
Length of Calving Season									
Calving Spread (days)	70	321	123.8	70.2	221.0	178.0	102.5	72.0	36.0
Breeding Success / Removals									
Open Rate	71	22	3.5	4.4	9.0	5.0	2.0	0.0	0
Removed Rate	70	67	11.3	10.1	22.5	16.0	9.5	6.0	0.0
Calving Success									
Calving Rate	71	107	96.1	9.3	100	100	100.0	95.0	88.0
Liveborn Calving Rate	71	107	93.6	9.8	100	100.0	95.0	90.0	84.0
Stillborn Rate	71	17	2.7	3.6	7.0	4.0	2.0	0.0	0
Assisted Calving Rate	71	62	12.3	13.3	29.0	16.0	9.0	2.0	0
Calf Survival and Treatment									
Calf Mortality Rate	71	26	2.8	5.4	8.0	3.0	0.0	0	0
Calf Treatment Rate	70	100	25.7	29.5	76	38.0	13.5	5.0	0
Productivity									
Weaned Calf Crop Rate	71	107	90.9	10.6	100.0	97.0	93.0	87.0	80.0
Average 200 Day Adjusted Weaning Weight (lbs)	71	786	542.3	72.5	632.0	592.0	520.0	491.0	453.0
Weight (lbs) Calf Weaned per Cow Exposed	71	689	494.7	90.3	590.0	564.0	485.0	436.0	400.0

NUMBER = number of herds (groups)
MAX = maximum (largest) observation
AVERAGE = mean
STD = standard deviation
PCTL90 = 90th percentile, PCTL75 = 75th percentile, MEDIAN = 50th percentile,
PCTL25 = 25th percentile, PCTL10 = 10th percentile
all rates are expressed as percentages

Table 99. Herd Management Practices Used by **Waterloo County** Producers in the Ontario Red Meat II Herd Health Option, in 1989

Management Practice	Number Herds	Number Yes	Percent Yes
Feed analysis	5	3	60.0
Ration formulation	5	4	80.0
Pasture improvement/rotation	5	5	100.0
Pregnancy examinations	5	5	100.0
Crossbreeding	5	3	60.0
Bull breeding soundness evaluation	5	4	80.0
Vaccinations	5	5	100.0
Deworming	5	4	80.0
Lice/warble treatment	5	5	100.0
Fly control	5	5	100.0
Postmortem examination	5	4	80.0
Vitamin E-Se injection	5	4	80.0
Growth promotants	5	0	0.0
Early dehorning	5	3	60.0
Polled	5	0	0.0
Early castration	5	2	40.0
Creep feeding	5	5	100.0

Table 100. Averages and Location of Measures of Herd Performance, **Waterloo** County, Ontario Red Meat II Herd Health Option, 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
Number									
Heifers	5	12	6.8	4.3	12.0	10.0	6.0	5.0	1.0
Cows	5	45	29.0	10.6	45.0	33.0	28.0	20.0	19.0
Bulls	5	3	1.6	0.9	3.0	2.0	1.0	1.0	1.0
Exposed to Mating	5	50	29.4	12.8	50.0	33.0	25.0	20.0	19.0
Calves Weaned	5	43	26.8	10.7	43.0	32.0	22.0	20.0	17.0
Length of Calving Season									
Calving Spread (days)	5	329	185.2	103.2	329.0	257.0	135.0	120.0	85.0
Breeding Success / Removals									
Open Rate	5	11	6.0	4.5	11.0	10.0	5.0	4.0	0
Removed Rate	5	32	19.8	10.4	32.0	28.0	20.0	10.0	9.0
Calving Success									
Calving Rate	5	100	93.4	6.1	100	100	90.0	89.0	88.0
Liveborn Calving Rate	5	100	92.6	6.8	100	100.0	89.0	88.0	86.0
Stillborn Rate	5	4	0.8	1.8	4.0	0.0	0.0	0.0	0
Assisted Calving Rate	5	36	19.2	10.0	36.0	21.0	14.0	13.0	12
Calf Survival and Treatment									
Calf Mortality Rate	5	3	0.6	1.3	3.0	0.0	0.0	0	0
Calf Treatment Rate	4	97	34.8	41.9	97	58.5	18.0	11.0	6
Productivity									
Weaned Calf Crop Rate	5	100	92.0	6.1	100.0	97.0	89.0	88.0	86.0
Average 200 Day Adjusted Weaning Weight (lbs)	5	615	525.6	67.7	615.0	553.0	540.0	480.0	440.0
Weight (lbs) Calf Weaned per Cow Exposed	5	615	486.6	89.3	615.0	524.0	487.0	413.0	394.0

NUMBER = number of herds (groups)
MAX = maximum (largest) observation
AVERAGE = mean
STD = standard deviation
PCTL90 = 90th percentile, PCTL75 = 75th percentile, MEDIAN = 50th percentile,
PCTL25 = 25th percentile, PCTL10 = 10th percentile
all rates are expressed as percentages

Table 101. Herd Management Practices Used by **Wellington County** Producers in the Ontario Red Meat II Herd Health Option, in 1989

Management Practice	Number Herds	Number Yes	Percent Yes
Feed analysis	25	12	48.0
Ration formulation	25	10	40.0
Pasture improvement/rotation	25	21	84.0
Pregnancy examinations	25	22	88.0
Crossbreeding	25	16	64.0
Bull breeding soundness evaluation	25	9	36.0
Vaccinations	25	21	84.0
Deworming	25	21	84.0
Lice/warble treatment	25	22	88.0
Fly control	25	19	76.0
Postmortem examination	25	14	56.0
Vitamin E-Se injection	25	23	92.0
Growth promotants	25	5	20.0
Early dehorning	25	14	56.0
Polled	25	1	4.0
Early castration	25	14	56.0
Creep feeding	25	21	84.0

Table 102. Averages and Location of Measures of Herd Performance, Wellington County, Ontario Red Meat II Herd Health Option, 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
Number									
Heifers	25	35	7.1	6.8	12.0	8.0	6.0	4.0	0.0
Cows	25	86	36.3	21.8	75.0	42.0	30.0	22.0	15.0
Bulls	24	6	1.6	1.6	3.0	2.0	1.0	1.0	0.0
Exposed to Mating	25	180	43.0	35.9	90.0	46.0	31.0	23.0	16.0
Calves Weaned	25	168	38.4	32.9	74.0	37.0	29.0	20.0	15.0
Length of Calving Season									
Calving Spread (days)	25	316	140.4	66.2	227.0	182.0	125.0	90.0	74.0
Breeding Success / Removals									
Open Rate	25	14	3.5	4.5	10.0	6.0	0.0	0.0	0.0
Removed Rate	25	56	14.8	13.4	36.0	18.0	10.0	8.0	0.0
Calving Success									
Calving Rate	25	106	96.3	5.9	103.0	100.0	100.0	92.0	87.0
Liveborn Calving Rate	25	106	93.8	6.8	100.0	100.0	95.0	88.0	84.0
Stillborn Rate	25	8	2.6	2.9	8.0	5.0	2.0	0.0	0.0
Assisted Calving Rate	25	31	8.0	7.6	14.0	11.0	8.0	3.0	0.0
Calf Survival and Treatment									
Calf Mortality Rate	25	19	4.6	6.0	15.0	7.0	2.0	0.0	0.0
Calf Treatment Rate	25	100	22.9	31.8	85.0	26.0	6.0	4.0	0.0
Productivity									
Weaned Calf Crop Rate	25	100	89.4	6.9	96.0	95.0	91.0	85.0	78.0
Average 200 Day Adjusted Weaning Weight (lbs)	24	760	567.7	82.6	695.0	612.0	552.5	512.0	470.0
Weight (lbs) Calf Weaned per Cow Exposed	24	661	505.8	82.4	635.0	563.5	486.5	448.0	395.0

NUMBER = number of herds (groups)
MAX = maximum (largest) observation
AVERAGE = mean
STD = standard deviation
PCTL90 = 90th percentile, PCTL75 = 75th percentile, MEDIAN = 50th percentile,
PCTL25 = 25th percentile, PCTL10 = 10th percentile
all rates are expressed as percentages

Table 103. Herd Management Practices Used by **York County** Producers in the Ontario Red Meat II Herd Health Option, in 1989

Management Practice	Number Herds	Number Yes	Percent Yes
Feed analysis	3	3	100.0
Ration formulation	3	2	66.7
Pasture improvement/rotation	3	2	66.7
Pregnancy examinations	3	3	100.0
Crossbreeding	3	3	100.0
Bull breeding soundness evaluation	3	1	33.3
Vaccinations	3	3	100.0
Deworming	3	3	100.0
Lice/warble treatment	3	3	100.0
Fly control	3	1	33.3
Postmortem examination	3	2	66.7
Vitamin E-Se injection	3	3	100.0
Growth promotants	3	0	0.0
Early dehorning	3	3	100.0
Polled	3	0	0.0
Early castration	3	3	100.0
Creep feeding	3	3	100.0

Table 104. Averages and Location of Measures of Herd Performance, **York County**, Ontario Red Meat II Herd Health Option, 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
Number									
Heifers	3	7	6.0	1.0	7.0	7.0	6.0	5.0	5.0
Cows	3	85	45.0	36.1	85.0	85.0	35.0	15.0	15.0
Bulls	3	5	2.3	2.3	5.0	5.0	1.0	1.0	1.0
Exposed to Mating	3	86	48.0	35.0	86.0	86.0	41.0	17.0	17.0
Calves Weaned	3	77	40.3	32.7	77.0	77.0	30.0	14.0	14.0
Length of Calving Season									
Calving Spread (days)	3	203	138.7	71.3	203.0	203.0	151.0	62.0	62.0
Breeding Success / Removals									
Open Rate	3	22	13.0	8.5	22.0	22.0	12.0	5.0	5
Removed Rate	3	13	12.3	0.6	13.0	13.0	12.0	12.0	12.0
Calving Success									
Calving Rate	3	94	87.3	8.3	94	94	90.0	78.0	78.0
Liveborn Calving Rate	3	86	80.3	6.7	86	86.0	82.0	73.0	73.0
Stillborn Rate	3	12	7.3	4.2	12.0	12.0	6.0	4.0	4
Assisted Calving Rate	3	12	9.0	3.0	12.0	12.0	9.0	6.0	6
Calf Survival and Treatment									
Calf Mortality Rate	2	0	0.0	0.0	0.0	0.0	0.0	0	0
Calf Treatment Rate	3	47	22.3	23.6	47	47.0	20.0	0.0	0
Productivity									
Weaned Calf Crop Rate	3	90	81.7	8.5	90.0	90.0	82.0	73.0	73.0
Average 200 Day Adjusted Weaning Weight (lbs)	3	657	589.7	98.9	657.0	657.0	636.0	476.0	476.0
Weight (lbs) Calf Weaned per Cow Exposed	3	541	477.3	58.5	541.0	541.0	465.0	426.0	426.0

NUMBER = number of herds (groups)
MAX = maximum (largest) observation
AVERAGE = mean
STD = standard deviation
PCTL90 = 90th percentile, PCTL75 = 75th percentile, MEDIAN = 50th percentile,
PCTL25 = 25th percentile, PCTL10 = 10th percentile
all rates are expressed as percentages

Section 4

Beef Cow-Calf Herds

Cattle Inventories
and
Herd Performance
Tabulated by
Individual County or District

Table 1. Average and Location Measures for the Number of Replacement Heifers by County or District, Red Meat II, Cow-Calf Herd Health Option Participants, 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
ALGOMA	14	20	7.0	6.8	16.0	13.0	4.5	1.0	0.0
BRANT	8	104	21.3	33.8	104.0	16.5	9.0	6.0	3.0
BRUCE	133	40	7.5	8.6	18.0	10.0	5.0	1.0	0.0
COCHRANE	15	30	11.5	9.1	21.0	18.0	9.0	2.0	0.0
DUFFERIN	20	27	7.6	6.7	16.0	11.0	6.0	2.0	0.0
DUNDAS	3	14	7.0	6.2	14.0	14.0	5.0	2.0	2.0
DURHAM.E	12	15	4.3	4.2	6.0	6.0	4.5	0.5	0.0
DURHAM.W	20	77	11.6	18.2	34.0	10.0	6.0	3.0	0.0
ELGIN	24	29	8.5	6.2	17.0	10.5	8.0	4.0	2.0
ESSEX	3	2	0.7	1.2	2.0	2.0	0.0	0.0	0.0
FRONTENAC	22	35	9.1	9.9	23.0	10.0	6.0	3.0	0.0
GLENGARRY	16	10	4.8	2.8	9.0	7.0	4.0	3.0	2.0
GRENVILLE	9	23	7.8	8.1	23.0	6.0	6.0	4.0	0.0
GREY	108	62	7.5	8.2	16.0	10.0	5.0	2.0	0.0
HALTON	2	5	4.0	1.4	5.0	5.0	4.0	3.0	3.0
HASTINGS	28	26	6.7	6.7	17.0	8.5	5.0	2.0	0.0
HLDMND.NRFLK	11	30	11.9	9.8	28.0	16.0	8.0	3.0	2.0
HMLTN.WNTWRTH	5	31	14.2	10.3	31.0	16.0	12.0	7.0	5.0
HURON	58	92	9.2	13.9	23.0	10.0	6.0	2.0	0.0
KENT	10	30	9.0	9.9	25.0	16.0	5.0	2.0	0.5
LAMBTON	12	14	5.0	4.6	13.0	6.5	4.5	1.5	0.0
LANARK	59	30	6.4	5.9	13.0	10.0	5.0	2.0	1.0
LEEDS	12	16	7.8	5.1	14.0	11.5	7.0	5.0	0.0
LNNX.ADD	19	70	10.6	14.7	12.0	10.0	8.0	6.0	2.0
MANITOULIN	33	55	11.8	12.8	28.0	16.0	8.0	3.0	0.0
MIDDLESEX	20	28	7.9	7.7	19.0	13.0	5.0	2.5	0.0
MUSKOKA	1	9	9.0	.	9.0	9.0	9.0	9.0	9.0
NIAGARA	4	5	1.5	2.4	5.0	3.0	0.5	0.0	0.0
NIPISSING	9	10	2.8	3.7	10.0	5.0	0.0	0.0	0.0
NORTHUMBERLAND	19	30	9.2	7.7	22.0	12.0	7.0	3.0	3.0
OTTAWA.CARLTON	32	61	12.2	13.3	29.0	14.0	8.0	4.0	2.0
OXFORD	11	20	7.5	7.3	18.0	15.0	5.0	2.0	0.0
PARRYSOUND	1	1	1.0	.	1.0	1.0	1.0	1.0	1.0
PEEL	10	10	4.6	3.1	9.0	8.0	3.5	3.0	1.0
PERTH	24	36	10.3	8.9	22.0	12.5	8.0	3.5	2.0
PETERBOROUGH	63	35	7.9	7.1	18.0	10.0	6.0	3.0	2.0
PRESCOTT	11	75	14.4	21.2	21.0	15.0	10.0	0.0	0.0
PRINCE.EDWARD	8	14	7.3	4.5	14.0	11.0	6.0	4.0	2.0
RAINY.RIVER	7	33	18.6	10.9	33.0	28.0	18.0	8.0	6.0
RENFREW	124	46	10.0	8.8	21.0	13.0	7.0	5.0	2.0
RUSSELL	3	15	11.0	5.3	15.0	15.0	13.0	5.0	5.0
SIMCOE	42	25	8.0	6.3	16.0	11.0	7.0	4.0	0.0
STORMONT	5	6	5.2	0.8	6.0	6.0	5.0	5.0	4.0
SUDBURY	17	15	6.4	4.4	15.0	9.0	6.0	3.0	0.0
THUNDER.BAY	2	18	10.5	10.6	18.0	18.0	10.5	3.0	3.0
TIMISKAMING	15	33	12.3	8.4	22.0	18.0	10.0	7.0	4.0
VICTORIA	70	34	6.6	6.9	16.5	9.0	5.0	2.0	0.0
WATERLOO	5	12	6.8	4.3	12.0	10.0	6.0	5.0	1.0
WELLINGTON	25	35	7.1	6.8	12.0	8.0	6.0	4.0	0.0
YORK	3	7	6.0	1.0	7.0	7.0	6.0	5.0	5.0

Table 2. Average and Location Measures for the Number of Cows, by County or District, Red Meat II, Cow-Calf Herd Health Option Participants, 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
ALGOMA	16	88	42.1	19.0	61.0	55.0	38.5	30.0	15.0
BRANT	8	182	56.5	52.6	182.0	54.0	45.0	26.0	20.0
BRUCE	135	427	49.9	46.9	96.0	60.0	40.0	23.0	15.0
COCHRANE	15	106	52.1	23.0	71.0	68.0	57.0	33.0	24.0
DUFFERIN	23	94	40.3	23.5	77.0	56.0	33.0	24.0	15.0
DUNDAS	4	30	19.5	7.3	30.0	24.5	17.0	14.5	14.0
DURHAM.E	12	159	53.2	43.0	120.0	52.0	42.5	24.5	18.0
DURHAM.W	21	267	62.9	67.4	141.0	61.0	35.0	22.0	12.0
ELGIN	24	112	38.6	27.4	73.0	46.0	34.0	19.0	12.0
ESSEX	3	20	11.0	10.1	20.0	20.0	13.0	0.0	0.0
FRONTENAC	23	209	36.7	41.9	61.0	40.0	24.0	17.0	12.0
GLENGARRY	16	60	22.2	13.5	37.0	27.5	17.0	11.5	11.0
GRENVILLE	9	220	39.8	68.1	220.0	19.0	15.0	14.0	10.0
GREY	112	251	43.9	33.5	81.0	54.0	34.0	23.5	15.0
HALTON	2	36	30.0	8.5	36.0	36.0	30.0	24.0	24.0
HASTINGS	29	81	35.9	21.0	71.0	50.0	30.0	18.0	14.0
HLDMND.NRFLK	11	70	35.9	17.1	50.0	43.0	40.0	16.0	16.0
HMLTN.WNTWRTH	5	63	38.6	21.2	63.0	58.0	34.0	23.0	15.0
HURON	61	176	43.6	33.7	74.0	53.0	33.0	24.0	17.0
KENT	11	203	53.0	55.2	81.0	80.0	35.0	18.0	16.0
LAMBTON	12	149	53.3	39.1	97.0	69.0	39.5	23.5	20.0
LANARK	60	114	35.1	23.7	58.0	44.0	29.0	16.5	12.5
LEEDS	12	59	30.2	14.3	46.0	42.0	26.5	21.0	14.0
LNNX.ADD	21	74	42.9	18.1	67.0	55.0	44.0	25.0	18.0
MANITOULIN	34	194	60.7	45.8	122.0	75.0	47.5	28.0	22.0
MIDDLESEX	21	172	57.0	50.6	138.0	80.0	36.0	18.0	13.0
MUSKOKA	1	33	33.0	.	33.0	33.0	33.0	33.0	33.0
NIAGARA	4	47	24.2	16.4	47.0	36.0	20.0	12.5	10.0
NIPISSING	9	51	21.3	12.8	51.0	25.0	19.0	12.0	10.0
NORTHUMBERLAND	19	95	37.3	25.6	95.0	49.0	35.0	18.0	11.0
OTTAWA.CARLTON	32	112	37.1	24.2	78.0	40.0	27.5	23.0	21.0
OXFORD	11	118	40.7	32.6	68.0	67.0	25.0	18.0	16.0
PARRYSOUND	1	37	37.0	.	37.0	37.0	37.0	37.0	37.0
PEEL	10	55	31.8	14.7	53.5	42.0	31.0	18.0	13.5
PERTH	25	86	39.6	19.8	61.0	57.0	37.0	21.0	15.0
PETERBOROUGH	63	140	42.2	28.5	83.0	52.0	32.0	22.0	15.0
PRESCOTT	12	409	77.0	110.0	130.0	80.0	32.0	26.0	18.0
PRINCE.EDWARD	8	43	28.4	7.7	43.0	32.0	27.0	24.5	17.0
RAINY.RIVER	7	114	62.0	28.5	114.0	72.0	59.0	34.0	28.0
RENFREW	130	240	49.5	40.6	99.5	63.0	40.0	24.0	14.0
RUSSELL	3	42	30.3	10.7	42.0	42.0	28.0	21.0	21.0
SIMCOE	43	113	40.3	26.4	83.0	52.0	33.0	21.0	12.0
STORMONT	5	42	23.4	11.3	42.0	26.0	18.0	17.0	14.0
SUDBURY	17	57	28.6	11.7	44.0	35.0	28.0	21.0	14.0
THUNDER.BAY	2	60	39.5	28.9	60.0	60.0	39.5	19.0	19.0
TIMISKAMING	14	108	41.2	25.5	77.0	46.0	38.5	26.0	12.0
VICTORIA	71	128	34.7	23.6	70.0	42.0	28.0	19.0	13.0
WATERLOO	5	45	29.0	10.6	45.0	33.0	28.0	20.0	19.0
WELLINGTON	25	86	36.3	21.8	75.0	42.0	30.0	22.0	15.0
YORK	3	85	45.0	36.1	85.0	85.0	35.0	15.0	15.0

Table 3. Average and Location Measures for the Number of Bulls, by County or District, Red Meat II, Cow-Calf Herd Health Option Participants, 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
ALGOMA	16	3	1.6	0.9	3.0	2.0	2.0	1.0	0.0
BRANT	8	14	2.9	4.5	14.0	2.0	1.5	1.0	0.0
BRUCE	134	20	2.0	2.2	4.0	2.0	1.0	1.0	1.0
COCHRANE	15	4	2.1	0.9	3.0	3.0	2.0	1.0	1.0
DUFFERIN	22	4	1.3	0.9	2.0	2.0	1.0	1.0	0.0
DUNDAS	4	2	1.5	0.6	2.0	2.0	1.5	1.0	1.0
DURHAM.E	12	12	2.2	3.3	5.0	2.0	1.0	1.0	0.0
DURHAM.W	20	22	3.4	4.9	7.5	4.5	2.0	1.0	0.5
ELGIN	24	9	2.0	2.1	4.0	3.0	1.0	1.0	0.0
ESSEX	3	1	0.7	0.6	1.0	1.0	1.0	0.0	0.0
FRONTENAC	22	8	2.1	2.2	6.0	3.0	1.0	1.0	0.0
GLENGARRY	15	2	1.1	0.7	2.0	2.0	1.0	1.0	0.0
GRENVILLE	9	9	2.1	3.2	9.0	1.0	1.0	0.0	0.0
GREY	109	19	1.9	2.1	3.0	2.0	1.0	1.0	1.0
HALTON	2	2	1.5	0.7	2.0	2.0	1.5	1.0	1.0
HASTINGS	26	16	1.7	3.0	2.0	2.0	1.0	1.0	0.0
HLDMND.NRFLK	11	6	2.5	1.6	5.0	3.0	2.0	1.0	1.0
HMLTN.WNTWRTH	5	15	5.4	6.1	15.0	8.0	2.0	1.0	1.0
HURON	59	8	1.9	1.9	5.0	2.0	1.0	1.0	0.0
KENT	9	10	2.7	2.9	10.0	3.0	2.0	1.0	0.0
LAMBTON	12	5	2.0	1.3	3.0	2.5	2.0	1.0	1.0
LANARK	60	5	1.5	1.1	3.0	2.0	1.0	1.0	0.0
LEEDS	12	2	1.3	0.5	2.0	2.0	1.0	1.0	1.0
LNNX.ADD	20	5	1.9	1.1	3.5	2.0	2.0	1.0	1.0
MANITOULIN	34	7	2.0	1.6	4.0	2.0	1.0	1.0	1.0
MIDDLESEX	21	10	2.6	2.5	6.0	4.0	2.0	1.0	1.0
MUSKOKA	1	1	1.0	.	1.0	1.0	1.0	1.0	1.0
NIAGARA	4	1	0.7	0.5	1.0	1.0	1.0	0.5	0.0
NIPISSING	9	3	1.3	0.7	3.0	1.0	1.0	1.0	1.0
NORTHUMBERLAND	18	5	2.0	1.4	5.0	2.0	2.0	1.0	0.0
OTTAWA.CARLTON	32	8	1.8	1.6	3.0	2.0	1.0	1.0	1.0
OXFORD	11	10	2.4	2.7	4.0	2.0	1.0	1.0	1.0
PARRYSOUND	1	1	1.0	.	1.0	1.0	1.0	1.0	1.0
PEEL	8	2	1.1	0.8	2.0	2.0	1.0	0.5	0.0
PERTH	24	7	1.7	1.5	3.0	2.0	1.0	1.0	0.0
PETERBOROUGH	63	25	2.0	3.3	4.0	2.0	1.0	1.0	0.0
PRESCOTT	12	20	3.2	5.4	5.0	2.5	1.0	1.0	1.0
PRINCE.EDWARD	7	2	1.4	0.8	2.0	2.0	2.0	1.0	0.0
RAINY.RIVER	7	4	2.7	0.7	4.0	3.0	3.0	2.0	2.0
RENFREW	126	18	2.2	2.2	4.0	3.0	2.0	1.0	1.0
RUSSELL	3	2	1.7	0.6	2.0	2.0	2.0	1.0	1.0
SIMCOE	43	7	1.7	1.2	3.0	2.0	2.0	1.0	1.0
STORMONT	5	2	1.0	0.7	2.0	1.0	1.0	1.0	0.0
SUDBURY	17	3	1.2	0.5	2.0	1.0	1.0	1.0	1.0
THUNDER.BAY	2	9	4.5	6.4	9.0	9.0	4.5	0.0	0.0
TIMISKAMING	15	5	2.1	1.1	3.0	3.0	2.0	1.0	1.0
VICTORIA	68	20	1.9	2.5	3.0	2.0	1.0	1.0	1.0
WATERLOO	5	3	1.6	0.9	3.0	2.0	1.0	1.0	1.0
WELLINGTON	24	6	1.6	1.6	3.0	2.0	1.0	1.0	0.0
YORK	3	5	2.3	2.3	5.0	5.0	1.0	1.0	1.0

Table 4. Average and Location Measures for the Number Cows Exposed, by County or District, Red Meat II, Cow-Calf Herd Health Option Participants, 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
ALGOMA	20	121	48.4	24.0	76.5	60.5	43.0	35.0	23.0
BRANT	7	207	67.6	65.4	207.0	86.0	50.0	22.0	20.0
BRUCE	140	457	55.5	51.8	109.0	64.5	43.0	25.0	16.5
COCHRANE	15	123	62.3	27.9	110.0	72.0	57.0	42.0	24.0
DUFFERIN	23	128	45.3	30.6	93.0	69.0	35.0	22.0	19.0
DUNDAS	6	68	30.0	20.1	68.0	36.0	22.5	17.0	14.0
DURHAM.E	11	174	56.1	50.9	130.0	64.0	45.0	18.0	18.0
DURHAM.W	21	351	70.5	79.8	163.0	63.0	40.0	25.0	19.0
ELGIN	25	132	40.8	30.1	75.0	47.0	34.0	20.0	12.0
ESSEX	3	18	15.7	2.5	18.0	18.0	16.0	13.0	13.0
FRONTENAC	23	244	43.0	49.5	92.0	50.0	26.0	19.0	14.0
GLENGARRY	16	60	23.6	13.9	44.0	29.5	19.0	14.0	11.0
GRENVILLE	9	210	40.4	64.1	210.0	21.0	19.0	15.0	11.0
GREY	105	162	47.8	31.6	89.0	55.0	40.0	26.0	18.0
HALTON	2	24	23.5	0.7	24.0	24.0	23.5	23.0	23.0
HASTINGS	29	78	38.0	21.1	76.0	50.0	31.0	21.0	14.0
HLDMND.NRFLK	11	105	41.4	24.5	54.0	46.0	42.0	24.0	16.0
HMLTN.WNTWRTH	5	71	42.8	26.2	71.0	70.0	34.0	24.0	15.0
HURON	61	214	50.0	41.3	88.0	57.0	35.0	26.0	17.0
KENT	10	110	42.8	31.9	95.5	53.0	33.5	18.0	13.0
LAMBTON	12	175	58.3	46.6	115.0	72.0	41.0	26.5	19.0
LANARK	60	114	36.6	24.2	62.0	44.0	32.0	19.0	13.0
LEEDS	12	65	35.5	16.9	57.0	48.0	34.5	21.5	16.0
LNNX.ADD	21	68	42.6	15.3	60.0	52.0	45.0	31.0	20.0
MANITOULIN	35	194	60.2	46.3	130.0	73.0	44.0	30.0	22.0
MIDDLESEX	21	172	63.5	50.9	138.0	90.0	48.0	22.0	15.0
MUSKOKA	1	42	42.0	.	42.0	42.0	42.0	42.0	42.0
NIAGARA	4	58	28.2	20.8	58.0	41.5	22.5	15.0	10.0
NIPISSING	9	48	23.8	12.4	48.0	29.0	26.0	12.0	10.0
NORTHUMBERLAND	18	110	42.4	31.1	110.0	50.0	38.5	18.0	14.0
OTTAWA.CARLTON	31	108	38.2	23.0	79.0	45.0	31.0	23.0	21.0
OXFORD	11	134	45.1	38.0	79.0	74.0	27.0	18.0	16.0
PARRYSOUND	1	32	32.0	.	32.0	32.0	32.0	32.0	32.0
PEEL	9	52	30.1	13.1	52.0	38.0	29.0	18.0	14.0
PERTH	27	90	43.7	22.8	80.0	57.0	37.0	22.0	18.0
PETERBOROUGH	64	148	45.2	32.4	100.0	56.5	31.5	24.0	16.0
PRESCOTT	14	521	76.7	131.8	130.0	57.0	35.5	25.0	14.0
PRINCE.EDWARD	8	56	33.6	10.9	56.0	38.5	30.0	26.5	23.0
RAINY.RIVER	8	145	76.7	39.3	145.0	101.5	70.5	47.0	31.0
RENFREW	126	238	53.2	41.6	109.0	68.0	42.5	24.0	17.0
RUSSELL	3	44	35.3	9.0	44.0	44.0	36.0	26.0	26.0
SIMCOE	44	175	46.9	34.5	92.0	58.0	39.5	22.5	14.0
STORMONT	5	41	24.4	11.1	41.0	30.0	20.0	17.0	14.0
SUDBURY	17	85	33.8	15.8	44.0	40.0	33.0	27.0	17.0
THUNDER.BAY	2	61	42.5	26.2	61.0	61.0	42.5	24.0	24.0
TIMISKAMING	15	155	49.0	35.2	89.0	58.0	43.0	30.0	14.0
VICTORIA	71	137	35.9	25.2	69.0	42.0	29.0	19.0	14.0
WATERLOO	5	50	29.4	12.8	50.0	33.0	25.0	20.0	19.0
WELLINGTON	25	180	43.0	35.9	90.0	46.0	31.0	23.0	16.0
YORK	3	86	48.0	35.0	86.0	86.0	41.0	17.0	17.0

Table 5. Average and Location Measures for the **Number Calves Weaned**, by County or District, Red Meat II, Cow-Calf Herd Health Option Participants, 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
ALGOMA	20	96	40.6	18.3	62.0	51.0	35.5	30.0	22.5
BRANT	7	146	50.7	44.8	146.0	57.0	46.0	20.0	18.0
BRUCE	139	427	49.1	46.2	98.0	56.0	38.0	22.0	14.0
COCHRANE	15	103	51.8	22.8	79.0	66.0	46.0	35.0	23.0
DUFFERIN	23	80	37.5	22.2	74.0	52.0	33.0	19.0	15.0
DUNDAS	6	41	23.5	11.7	41.0	33.0	21.5	14.0	10.0
DURHAM.E	12	145	50.0	42.2	124.0	51.0	41.5	18.0	13.0
DURHAM.W	21	294	60.4	68.2	154.0	57.0	28.0	23.0	18.0
ELGIN	25	120	37.0	27.4	74.0	38.0	30.0	18.0	12.0
ESSEX	3	13	10.7	2.5	13.0	13.0	11.0	8.0	8.0
FRONTENAC	23	232	38.5	47.1	82.0	41.0	24.0	14.0	12.0
GLENGARRY	16	45	19.9	10.4	38.0	25.5	18.0	11.0	10.0
GRENVILLE	9	181	35.1	55.1	181.0	23.0	15.0	15.0	9.0
GREY	107	261	43.8	34.2	78.0	50.0	34.0	23.0	16.0
HALTON	2	23	22.5	0.7	23.0	23.0	22.5	22.0	22.0
HASTINGS	29	76	34.4	20.1	72.0	44.0	27.0	19.0	13.0
HLDMND.NRFLK	11	100	39.3	24.9	54.0	54.0	38.0	17.0	15.0
HMLTN.WNTWRTH	5	56	28.8	17.9	56.0	35.0	26.0	17.0	10.0
HURON	60	192	43.9	36.3	78.0	53.0	30.5	24.0	15.0
KENT	10	77	35.5	24.8	76.5	51.0	27.0	16.0	12.5
LAMBTON	12	157	51.9	42.0	97.0	70.5	35.0	22.5	16.0
LANARK	60	110	31.7	21.1	56.5	39.0	27.5	14.5	11.0
LEEDS	11	45	25.5	10.9	37.0	35.0	25.0	14.0	13.0
LNNX.ADD	21	66	36.6	15.1	52.0	50.0	37.0	21.0	16.0
MANITOULIN	35	169	52.3	40.7	109.0	55.0	35.0	28.0	17.0
MIDDLESEX	21	158	54.8	46.5	131.0	75.0	35.0	20.0	15.0
MUSKOKA	1	32	32.0	.	32.0	32.0	32.0	32.0	32.0
NIAGARA	4	49	26.0	16.5	49.0	37.0	22.5	15.0	10.0
NIPISSING	9	50	22.1	13.2	50.0	26.0	20.0	12.0	10.0
NORTHUMBERLAND	19	99	36.4	27.6	99.0	41.0	31.0	17.0	11.0
OTTAWA.CARLTON	30	93	32.9	19.4	67.5	39.0	25.0	20.0	16.5
OXFORD	11	113	39.6	31.4	69.0	66.0	26.0	17.0	16.0
PARRYSOUND	1	32	32.0	.	32.0	32.0	32.0	32.0	32.0
PEEL	10	42	28.0	11.2	41.5	40.0	29.0	17.0	13.5
PERTH	27	83	38.3	18.0	60.0	54.0	35.0	22.0	17.0
PETERBOROUGH	64	140	39.6	28.4	77.0	50.5	28.0	22.5	14.0
PRESCOTT	14	423	65.7	106.6	113.0	54.0	31.0	25.0	12.0
PRINCE.EDWARD	7	43	29.3	9.5	43.0	42.0	26.0	22.0	19.0
RAINY.RIVER	8	130	65.0	33.4	130.0	79.0	60.5	42.0	27.0
RENFREW	126	215	46.5	36.3	93.0	56.0	35.5	22.0	14.0
RUSSELL	3	40	31.0	10.1	40.0	40.0	33.0	20.0	20.0
SIMCOE	44	167	42.8	32.5	87.0	51.5	34.0	20.0	13.0
STORMONT	5	41	26.4	9.8	41.0	30.0	26.0	18.0	17.0
SUDBURY	17	69	28.1	13.2	38.0	31.0	28.0	19.0	15.0
THUNDER.BAY	2	58	39.0	26.9	58.0	58.0	39.0	20.0	20.0
TIMISKAMING	15	110	41.0	25.4	82.0	46.0	40.0	29.0	14.0
VICTORIA	71	128	32.5	22.8	58.0	38.0	27.0	17.0	13.0
WATERLOO	5	43	26.8	10.7	43.0	32.0	22.0	20.0	17.0
WELLINGTON	25	168	38.4	32.9	74.0	37.0	29.0	20.0	15.0
YORK	3	77	40.3	32.7	77.0	77.0	30.0	14.0	14.0

Table 6. Average and Location Measures for Calving Spread (days), by County or District, Red Meat II, Cow-Calf Herd Health Option Participants, 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
ALGOMA	20	350	125.4	89.1	296.5	129.5	93.5	71.5	58.0
BRANT	7	332	146.1	106.4	332.0	219.0	127.0	54.0	40.0
BRUCE	139	364	126.1	73.1	223.0	157.0	103.0	77.0	54.0
COCHRANE	15	195	97.1	39.4	155.0	110.0	92.0	71.0	61.0
DUFFERIN	21	300	113.6	67.6	210.0	114.0	91.0	71.0	67.0
DUNDAS	6	215	147.0	63.7	215.0	202.0	154.0	95.0	62.0
DURHAM.E	9	278	129.8	79.6	278.0	162.0	114.0	85.0	33.0
DURHAM.W	21	352	158.8	106.3	311.0	274.0	119.0	76.0	50.0
ELGIN	21	347	151.2	81.8	249.0	199.0	151.0	84.0	56.0
ESSEX	3	261	157.3	91.3	261.0	261.0	122.0	89.0	89.0
FRONTENAC	23	315	149.4	84.3	297.0	229.0	122.0	86.0	56.0
GLENGARRY	16	342	113.7	74.2	219.0	124.0	88.0	80.0	52.0
GRENVILLE	9	184	95.1	50.9	184.0	108.0	89.0	58.0	37.0
GREY	104	364	143.9	70.9	239.0	171.0	133.5	89.5	69.0
HALTON	2	67	60.0	9.9	67.0	67.0	60.0	53.0	53.0
HASTINGS	29	350	131.3	86.1	263.0	149.0	90.0	85.0	57.0
HLDMND.NRFLK	11	275	119.4	70.3	185.0	148.0	126.0	56.0	38.0
HMLTN.WNTWRTH	5	314	247.6	77.9	314.0	304.0	260.0	241.0	119.0
HURON	58	385	144.5	89.8	290.0	184.0	112.5	77.0	54.0
KENT	10	346	129.3	91.9	287.5	127.0	104.0	77.0	45.5
LAMBTON	11	180	110.2	42.5	169.0	148.0	92.0	79.0	69.0
LANARK	59	360	150.6	100.3	333.0	220.0	111.0	68.0	43.0
LEEDS	11	317	131.6	92.9	262.0	231.0	88.0	76.0	51.0
LNNX.ADD	20	363	140.1	78.1	250.5	158.5	116.0	82.5	76.5
MANITOULIN	35	354	155.6	99.7	314.0	243.0	124.0	64.0	53.0
MIDDLESEX	21	313	160.2	86.6	284.0	224.0	143.0	93.0	70.0
MUSKOKA	1	140	140.0	.	140.0	140.0	140.0	140.0	140.0
NIAGARA	4	283	129.7	102.9	283.0	185.5	87.5	74.0	61.0
NIPISSING	9	263	108.8	63.7	263.0	122.0	89.0	78.0	47.0
NORTHUMBERLAND	18	362	137.4	98.5	308.0	170.0	94.5	70.0	44.0
OTTAWA.CARLTON	31	364	138.7	71.8	236.0	179.0	118.0	87.0	78.0
OXFORD	11	185	105.4	37.5	148.0	136.0	99.0	81.0	66.0
PARRYSOUND	1	141	141.0	.	141.0	141.0	141.0	141.0	141.0
PEEL	9	276	129.2	62.9	276.0	150.0	108.0	106.0	68.0
PERTH	26	360	186.8	97.8	330.0	262.0	176.5	113.0	63.0
PETERBOROUGH	62	364	158.8	89.6	287.0	242.0	136.0	88.0	59.0
PRESCOTT	12	295	113.7	79.9	257.0	121.5	86.5	65.0	56.0
PRINCE.EDWARD	8	273	141.5	67.6	273.0	177.5	132.5	83.5	72.0
RAINY.RIVER	7	155	107.8	34.6	155.0	148.0	107.0	78.0	70.0
RENFREW	122	364	130.7	68.8	232.0	187.0	113.0	74.0	56.0
RUSSELL	3	250	145.0	93.0	250.0	250.0	112.0	73.0	73.0
SIMCOE	44	364	131.0	85.1	280.0	162.0	99.5	73.5	56.0
STORMONT	5	195	139.2	52.9	195.0	186.0	139.0	106.0	70.0
SUDBURY	17	332	131.7	90.6	285.0	162.0	103.0	61.0	42.0
THUNDER.BAY	2	162	136.5	36.1	162.0	162.0	136.5	111.0	111.0
TIMISKAMING	15	235	116.3	44.1	155.0	147.0	107.0	89.0	80.0
VICTORIA	70	321	123.8	70.2	221.0	178.0	102.5	72.0	36.0
WATERLOO	5	329	185.2	103.2	329.0	257.0	135.0	120.0	85.0
WELLINGTON	25	316	140.4	66.2	227.0	182.0	125.0	90.0	74.0
YORK	3	203	138.7	71.3	203.0	203.0	151.0	62.0	62.0

Table 7. Average and Location Measures for Open Rate (%), by County or District, Red Meat II, Cow-Calf Herd Health Option Participants, 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
ALGOMA	20	11	3.7	3.4	8.5	6.0	3.5	0.0	0
BRANT	7	17	7.3	5.0	17.0	10.0	5.0	4.0	2
BRUCE	140	30	3.9	4.7	10.0	6.0	3.0	0.0	0
COCHRANE	15	11	4.4	3.9	10.0	8.0	4.0	1.0	0
DUFFERIN	23	23	3.6	5.3	9.0	6.0	1.0	0.0	0
DUNDAS	6	14	2.8	5.6	14.0	3.0	0.0	0.0	0
DURHAM.E	10	11	2.9	3.7	8.5	5.0	1.5	0.0	0
DURHAM.W	21	13	5.6	3.9	11.0	8.0	5.0	3.0	0
ELGIN	25	29	6.3	9.0	18.0	11.0	0.0	0.0	0
ESSEX	2	0	0.0	0.0	0.0	0.0	0.0	0.0	0
FRONTENAC	23	32	4.3	6.9	9.0	7.0	2.0	0.0	0
GLENGARRY	16	29	3.5	7.4	9.0	3.0	0.0	0.0	0
GRENVILLE	9	11	6.0	4.8	11.0	10.0	7.0	0.0	0
GREY	105	19	3.6	4.0	9.0	6.0	3.0	0.0	0
HALTON	2	4	4.0	0.0	4.0	4.0	4.0	4.0	4
HASTINGS	29	18	3.7	4.6	9.0	7.0	2.0	0.0	0
HLDMND.NRFLK	11	14	3.6	4.9	12.0	5.0	2.0	0.0	0
HMLTN.WNTWRTH	5	31	14.4	10.2	31.0	15.0	13.0	9.0	4
HURON	60	18	3.9	4.8	11.5	6.0	3.0	0.0	0
KENT	10	19	6.2	5.8	14.0	9.0	6.5	0.0	0
LAMBTON	12	11	3.7	3.9	8.0	6.5	3.0	0.0	0
LANARK	60	25	3.9	5.6	10.0	6.5	1.0	0.0	0
LEEDS	12	15	5.0	5.1	12.0	8.5	4.0	0.0	0
LNNX.ADD	21	13	3.8	4.1	9.0	7.0	3.0	0.0	0
MANITOULIN	35	10	3.5	3.2	8.0	6.0	3.0	0.0	0
MIDDLESEX	21	31	4.6	7.0	8.0	7.0	3.0	0.0	0
MUSKOKA	1	2	2.0	.	2.0	2.0	2.0	2.0	2
NIAGARA	4	10	3.0	4.8	10.0	6.0	1.0	0.0	0
NIPISSING	9	46	6.2	15.1	46.0	3.0	0.0	0.0	0
NORTHUMBERLAND	17	21	5.0	5.5	14.0	6.0	5.0	2.0	0
OTTAWA.CARLTON	31	25	4.4	5.2	9.0	6.0	4.0	0.0	0
OXFORD	11	22	6.6	7.4	16.0	11.0	4.0	0.0	0
PARRYSOUND	1	0	0.0	.	0.0	0.0	0.0	0.0	0
PEEL	9	15	4.6	4.6	15.0	6.0	3.0	3.0	0
PERTH	27	29	3.8	5.7	7.0	5.0	3.0	0.0	0
PETERBOROUGH	64	31	4.8	5.7	11.0	8.0	4.0	0.0	0
PRESCOTT	14	11	3.9	3.6	8.0	6.0	3.5	0.0	0
PRINCE.EDWARD	8	22	6.6	7.9	22.0	11.0	4.5	0.0	0
RAINY.RIVER	8	25	7.4	7.8	25.0	8.5	5.0	3.5	0
RENFREW	126	28	4.1	5.2	10.0	6.0	3.0	0.0	0
RUSSELL	3	5	2.7	2.5	5.0	5.0	3.0	0.0	0
SIMCOE	44	21	3.4	4.6	8.0	5.0	2.0	0.0	0
STORMONT	5	0	0.0	0.0	0.0	0.0	0.0	0.0	0
SUDBURY	17	14	2.1	4.0	9.0	2.0	0.0	0.0	0
THUNDER.BAY	2	8	5.5	3.5	8.0	8.0	5.5	3.0	3
TIMISKAMING	15	14	3.4	4.0	7.0	7.0	2.0	0.0	0
VICTORIA	71	22	3.5	4.4	9.0	5.0	2.0	0.0	0
WATERLOO	5	11	6.0	4.5	11.0	10.0	5.0	4.0	0
WELLINGTON	25	14	3.5	4.5	10.0	6.0	0.0	0.0	0
YORK	3	22	13.0	8.5	22.0	22.0	12.0	5.0	5

Table 8. Average and Location Measures for Removal Rate (%), by County or District, Red Meat II, Cow-Calf Herd Health Option Participants, 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
ALGOMA	20	37	17.1	11.1	32.5	25.0	17.5	6.0	5.0
BRANT	7	31	15.4	8.5	31.0	20.0	12.0	10.0	5.0
BRUCE	139	40	12.4	8.8	27.0	17.0	11.0	6.0	2.0
COCHRANE	15	30	16.4	7.4	25.0	21.0	17.0	12.0	6.0
DUFFERIN	23	33	14.4	9.3	24.0	21.0	14.0	7.0	5.0
DUNDAS	6	32	24.8	6.1	32.0	29.0	26.5	18.0	17.0
DURHAM.E	9	28	9.1	9.5	28.0	11.0	9.0	0.0	0.0
DURHAM.W	21	47	16.9	13.1	36.0	20.0	13.0	8.0	5.0
ELGIN	24	51	11.3	11.9	27.0	15.5	8.0	2.0	0.0
ESSEX	2	25	12.5	17.7	25.0	25.0	12.5	0.0	0.0
FRONTENAC	23	42	13.1	12.0	35.0	20.0	11.0	4.0	0.0
GLENGARRY	15	27	11.1	9.9	27.0	17.0	8.0	0.0	0.0
GRENVILLE	9	33	15.8	8.8	33.0	18.0	16.0	14.0	0.0
GREY	101	60	12.6	10.2	25.0	17.0	10.0	6.0	3.0
HALTON	2	26	15.0	15.6	26.0	26.0	15.0	4.0	4.0
HASTINGS	29	24	9.9	6.4	18.0	14.0	11.0	4.0	0.0
HLDMND.NRFLK	10	33	12.6	11.2	31.0	19.0	10.5	3.0	1.0
HMLTN.WNTWRTH	5	72	27.0	25.5	72.0	21.0	18.0	13.0	11.0
HURON	59	44	11.2	8.9	23.0	16.0	10.0	5.0	0.0
KENT	10	29	9.5	8.8	24.5	9.0	8.0	5.0	0.0
LAMBTON	12	21	8.8	6.9	16.0	14.5	8.5	2.0	1.0
LANARK	60	38	13.5	9.6	29.0	18.0	10.5	8.0	4.5
LEEDS	12	54	18.7	16.1	46.0	22.5	12.0	9.5	8.0
LNNX.ADD	21	51	12.7	12.2	24.0	17.0	10.0	5.0	0.0
MANITOULIN	35	41	11.8	9.8	25.0	18.0	9.0	5.0	0.0
MIDDLESEX	21	33	9.9	9.3	21.0	14.0	8.0	2.0	0.0
MUSKOKA	1	7	7.0	.	7.0	7.0	7.0	7.0	7.0
NIAGARA	4	30	13.3	13.8	30.0	24.5	11.5	2.0	0.0
NIPISSING	7	46	10.0	16.7	46.0	14.0	4.0	0.0	0.0
NORTHUMBERLAND	18	36	11.0	9.8	24.0	17.0	7.5	3.0	0.0
OTTAWA.CARLTON	30	49	11.8	10.9	23.5	13.0	10.0	5.0	1.5
OXFORD	10	22	12.2	7.0	20.5	19.0	13.5	7.0	2.5
PARRYSOUND	1	12	12.0	.	12.0	12.0	12.0	12.0	12.0
PEEL	9	25	7.9	8.8	25.0	7.0	6.0	3.0	0.0
PERTH	27	47	14.8	12.6	39.0	17.0	12.0	7.0	0.0
PETERBOROUGH	62	59	13.2	10.8	25.0	21.0	11.5	6.0	0.0
PRESCOTT	13	22	10.2	7.4	19.0	14.0	11.0	6.0	0.0
PRINCE.EDWARD	7	31	13.3	10.2	31.0	21.0	13.0	7.0	0.0
RAINY.RIVER	8	20	11.5	6.1	20.0	17.0	10.5	7.0	3.0
RENFREW	126	58	11.9	9.2	23.0	17.0	10.0	6.0	0.0
RUSSELL	3	15	8.3	6.5	15.0	15.0	8.0	2.0	2.0
SIMCOE	42	29	9.7	7.5	21.0	12.0	9.0	5.0	2.0
STORMONT	5	17	11.8	3.7	17.0	13.0	12.0	10.0	7.0
SUDBURY	17	32	12.6	10.4	30.0	18.0	11.0	6.0	0.0
THUNDER.BAY	2	41	29.0	16.9	41.0	41.0	29.0	17.0	17.0
TIMISKAMING	15	25	10.8	8.1	22.0	19.0	7.0	4.0	2.0
VICTORIA	70	67	11.3	10.1	22.5	16.0	9.5	6.0	0.0
WATERLOO	5	32	19.8	10.4	32.0	28.0	20.0	10.0	9.0
WELLINGTON	25	56	14.8	13.4	36.0	18.0	10.0	8.0	0.0
YORK	3	13	12.3	0.6	13.0	13.0	12.0	12.0	12.0

Table 9. Average and Location Measures for Calving Rate (%), by County or District, Red Meat II, Cow-Calf Herd Health Option Participants, 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
ALGOMA	20	116	95.1	9.3	105	100	96.0	92.0	80.0
BRANT	7	96	85.6	12.2	96	95	92.0	78.0	64.0
BRUCE	140	114	95.9	6.6	101	100	98.0	92.0	88.0
COCHRANE	15	100	90.9	8.1	100	97	93.0	82.0	78.0
DUFFERIN	23	105	92.0	13.0	103	100	97.0	83.0	77.0
DUNDAS	6	103	93.3	12.5	103	100	100.0	86.0	71.0
DURHAM.E	10	100	97.6	2.7	100	100	98.5	95.0	94.0
DURHAM.W	21	117	96.7	9.1	105	100	99.0	93.0	88.0
ELGIN	25	118	95.0	8.9	100	100	98.0	89.0	83.0
ESSEX	2	108	94.5	19.1	108	108	94.5	81.0	81.0
FRONTENAC	23	104	94.6	8.7	100	100	98.0	92.0	84.0
GLENGARRY	16	100	93.9	10.6	100	100	100.0	94.5	73.0
GRENVILLE	9	100	92.8	5.8	100	100	91.0	89.0	84.0
GREY	103	110	95.9	6.9	104	100	97.0	93.0	86.0
HALTON	2	96	96.0	0.0	96	96	96.0	96.0	96.0
HASTINGS	29	107	96.6	6.1	106	100	99.0	93.0	88.0
HLDMND.NRFLK	11	102	93.2	10.4	100	100	96.0	93.0	75.0
HMLTN.WNTWRTH	5	96	85.0	9.9	96	88	87.0	85.0	69.0
HURON	59	109	95.2	9.8	104	100	100.0	92.0	84.0
KENT	10	100	91.6	9.4	100	100	93.5	91.0	75.0
LAMBTON	12	102	96.9	4.3	100	100	99.5	93.0	92.0
LANARK	60	108	94.6	10.1	103	100	100.0	90.0	82.5
LEEDS	12	104	86.3	15.6	100	96	91.0	80.0	67.0
LNNX.ADD	21	102	93.5	11.3	100	100	97.0	93.0	88.0
MANITOULIN	35	110	94.9	9.0	100	100	95.0	93.0	82.0
MIDDLESEX	21	112	95.7	8.7	100	100	97.0	92.0	90.0
MUSKOKA	1	76	76.0	.	76	76	76.0	76.0	76.0
NIAGARA	4	100	100.0	0.0	100	100	100.0	100.0	100.0
NIPISSING	9	104	93.8	16.7	104	100	100.0	97.0	50.0
NORTHUMBERLAND	18	111	95.1	6.9	100	100	95.5	93.0	86.0
OTTAWA.CARLTON	30	104	92.8	7.7	100	100	95.0	90.0	79.5
OXFORD	11	100	95.3	6.1	100	100	97.0	89.0	89.0
PARRYSOUND	1	100	100.0	.	100	100	100.0	100.0	100.0
PEEL	9	110	95.9	8.9	110	100	97.0	93.0	81.0
PERTH	27	114	97.0	9.7	104	102	100.0	95.0	86.0
PETERBOROUGH	64	116	95.6	7.9	102	100	96.5	92.5	88.0
PRESCOTT	14	100	95.1	4.4	100	100	94.5	92.0	89.0
PRINCE.EDWARD	8	100	90.4	9.5	100	100	90.5	82.5	77.0
RAINY.RIVER	8	101	90.6	7.9	101	97	90.5	85.5	78.0
RENFREW	126	114	95.3	8.4	102	100	97.0	92.0	86.0
RUSSELL	3	100	97.3	2.5	100	100	97.0	95.0	95.0
SIMCOE	44	135	96.7	10.4	104	100	98.0	94.5	86.0
STORMONT	5	129	105.8	12.9	129	100	100.0	100.0	100.0
SUDBURY	17	103	93.2	10.3	100	100	98.0	91.0	70.0
THUNDER.BAY	2	97	90.0	9.9	97	97	90.0	83.0	83.0
TIMISKAMING	15	107	95.1	7.9	100	100	97.0	93.0	81.0
VICTORIA	71	107	96.1	9.3	100	100	100.0	95.0	88.0
WATERLOO	5	100	93.4	6.1	100	100	90.0	89.0	88.0
WELLINGTON	25	106	96.3	5.9	103	100	100.0	92.0	87.0
YORK	3	94	87.3	8.3	94	94	90.0	78.0	78.0

Table 10. Average and Location Measures for Liveborn Calving Rate (%), by County or District, Red Meat II, Cow-Calf Herd Health Option Participants, 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
ALGOMA	20	107	90.0	8.8	101	95.0	92.0	84.5	77.0
BRANT	7	94	82.3	12.5	94	91.0	88.0	77.0	58.0
BRUCE	140	108	92.3	7.9	100	98.0	94.0	88.0	81.5
COCHRANE	15	100	88.3	8.9	100	94.0	90.0	79.0	74.0
DUFFERIN	23	100	88.3	12.2	100	97.0	93.0	80.0	77.0
DUNDAS	6	100	89.7	10.2	100	95.0	93.0	86.0	71.0
DURHAM.E	10	100	93.5	6.5	100	100.0	93.5	92.0	84.0
DURHAM.W	21	108	92.8	8.3	100	98.0	93.0	90.0	87.0
ELGIN	25	112	92.6	9.0	100	100.0	94.0	89.0	76.0
ESSEX	3	100	91.0	9.5	100	100.0	92.0	81.0	81.0
FRONTENAC	23	104	92.3	9.5	100	100.0	94.0	88.0	79.0
GLENGARRY	16	100	91.2	11.4	100	100.0	93.5	91.0	70.0
GRENVILLE	9	100	90.6	5.0	100	92.0	90.0	89.0	84.0
GREY	104	110	92.2	7.5	100	97.0	93.0	88.0	82.0
HALTON	2	96	96.0	0.0	96	96.0	96.0	96.0	96.0
HASTINGS	29	107	94.5	6.4	100	99.0	94.0	92.0	88.0
HLDMND.NRFLK	11	100	91.2	9.7	100	98.0	94.0	88.0	75.0
HMLTN.WNTWRTH	5	82	76.8	7.3	82	80.0	79.0	79.0	64.0
HURON	59	105	91.3	9.8	101	97.0	93.0	88.0	81.0
KENT	10	100	89.4	8.8	98	95.0	91.5	89.0	74.0
LAMBTON	12	100	92.3	6.4	99	96.5	94.0	88.0	84.0
LANARK	60	108	91.4	10.8	100	100.0	93.5	86.0	75.0
LEEDS	12	100	81.3	14.7	94	93.0	83.5	75.5	67.0
LNNX.ADD	21	100	90.0	11.9	100	98.0	93.0	88.0	84.0
MANITOULIN	35	110	90.9	10.1	100	97.0	92.0	85.0	80.0
MIDDLESEX	21	104	91.3	13.3	100	100.0	95.0	88.0	84.0
MUSKOKA	1	76	76.0	.	76	76.0	76.0	76.0	76.0
NIAGARA	4	100	99.3	1.5	100	100.0	100.0	98.5	97.0
NIPISSING	9	100	91.9	16.4	100	100.0	100.0	94.0	50.0
NORTHUMBERLAND	18	100	92.4	5.5	100	95.0	93.0	88.0	86.0
OTTAWA.CARLTON	31	100	89.7	8.3	100	97.0	91.0	83.0	77.0
OXFORD	11	100	92.4	7.0	100	100.0	93.0	89.0	86.0
PARRYSOUND	1	97	97.0	.	97	97.0	97.0	97.0	97.0
PEEL	9	107	92.1	8.9	107	94.0	93.0	91.0	77.0
PERTH	27	106	94.1	10.3	104	100.0	98.0	88.0	82.0
PETERBOROUGH	64	116	92.5	8.7	100	97.0	93.5	89.0	83.0
PRESCOTT	14	100	91.5	6.2	100	95.0	92.0	89.0	83.0
PRINCE.EDWARD	8	100	88.5	11.7	100	100.0	88.5	81.0	69.0
RAINY.RIVER	8	92	86.8	5.2	92	91.0	88.0	83.5	77.0
RENFREW	126	108	91.8	9.3	100	98.0	93.5	88.0	81.0
RUSSELL	3	92	91.7	0.6	92	92.0	92.0	91.0	91.0
SIMCOE	44	130	93.9	10.0	101	100.0	95.0	90.5	86.0
STORMONT	5	112	96.6	11.3	112	100.0	100.0	86.0	85.0
SUDBURY	17	100	88.9	9.6	100	95.0	91.0	84.0	68.0
THUNDER.BAY	2	97	90.0	9.9	97	97.0	90.0	83.0	83.0
TIMISKAMING	15	107	92.9	9.6	100	98.0	96.0	90.0	80.0
VICTORIA	71	107	93.6	9.8	100	100.0	95.0	90.0	84.0
WATERLOO	5	100	92.6	6.8	100	100.0	89.0	88.0	86.0
WELLINGTON	25	106	93.8	6.8	100	100.0	95.0	88.0	84.0
YORK	3	86	80.3	6.7	86	86.0	82.0	73.0	73.0

Table 11. Average and Location Measures for Stillborn Rate (%), by County or District, Red Meat II, Cow-Calf Herd Health Option Participants, 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
ALGOMA	20	16	5.5	4.7	13.0	8.0	5.0	2.5	0
BRANT	7	6	3.6	2.1	6.0	5.0	5.0	1.0	1
BRUCE	140	27	3.9	5.1	10.0	5.0	2.0	0.0	0
COCHRANE	15	13	3.1	3.6	9.0	4.0	3.0	0.0	0
DUFFERIN	23	21	3.8	4.8	8.0	6.0	4.0	0.0	0
DUNDAS	6	11	3.7	4.5	11.0	6.0	2.5	0.0	0
DURHAM.E	10	19	4.4	5.8	13.0	7.0	3.0	0.0	0
DURHAM.W	21	9	4.0	2.8	8.0	6.0	4.0	2.0	0
ELGIN	25	11	2.6	3.3	8.0	4.0	1.0	0.0	0
ESSEX	2	15	7.5	10.6	15.0	15.0	7.5	0.0	0
FRONTENAC	23	13	2.5	3.5	7.0	4.0	0.0	0.0	0
GLENGARRY	16	10	3.1	3.4	7.0	6.0	2.0	0.0	0
GRENVILLE	9	8	2.3	3.2	8.0	5.0	0.0	0.0	0
GREY	103	23	4.1	4.1	9.0	6.0	3.0	0.0	0
HALTON	2	0	0.0	0.0	0.0	0.0	0.0	0.0	0
HASTINGS	29	12	2.2	3.2	6.0	4.0	0.0	0.0	0
HLDMND.NRFLK	11	7	2.1	2.5	6.0	4.0	2.0	0.0	0
HMLTN.WNTWRTH	5	17	8.8	5.3	17.0	10.0	8.0	6.0	3
HURON	59	12	4.2	3.4	8.0	6.0	4.0	0.0	0
KENT	10	12	2.4	3.8	8.0	4.0	0.5	0.0	0
LAMBTON	12	14	5.1	4.6	12.0	8.0	3.5	1.5	0
LANARK	60	22	3.5	4.9	9.5	5.0	3.0	0.0	0
LEEDS	12	24	5.5	6.6	9.0	7.0	4.5	0.0	0
LNNX.ADD	21	15	3.6	4.3	9.0	6.0	2.0	0.0	0
MANITOULIN	35	17	4.4	4.0	8.0	6.0	4.0	2.0	0
MIDDLESEX	21	38	5.3	8.9	14.0	7.0	2.0	0.0	0
MUSKOKA	1	0	0.0	.	0.0	0.0	0.0	0.0	0
NIAGARA	4	4	1.0	2.0	4.0	2.0	0.0	0.0	0
NIPISSING	9	10	1.9	3.8	10.0	0.0	0.0	0.0	0
NORTHUMBERLAND	18	11	2.8	3.7	10.0	5.0	1.5	0.0	0
OTTAWA.CARLTON	30	13	3.0	3.8	8.5	5.0	2.0	0.0	0
OXFORD	11	7	3.0	3.0	7.0	6.0	3.0	0.0	0
PARRYSOUND	1	3	3.0	.	3.0	3.0	3.0	3.0	3
PEEL	9	10	3.9	3.1	10.0	5.0	4.0	2.0	0
PERTH	27	12	3.2	3.9	10.0	7.0	1.0	0.0	0
PETERBOROUGH	64	14	3.3	3.1	8.0	5.5	3.0	0.0	0
PRESCOTT	14	14	3.9	5.1	14.0	6.0	2.0	0.0	0
PRINCE.EDWARD	8	12	2.3	4.2	12.0	3.0	0.0	0.0	0
RAINY.RIVER	8	10	4.3	3.8	10.0	7.5	4.0	0.5	0
RENFREW	126	33	3.8	4.9	11.0	6.0	2.0	0.0	0
RUSSELL	3	8	6.3	1.5	8.0	8.0	6.0	5.0	5
SIMCOE	44	12	2.8	3.5	9.0	4.5	2.0	0.0	0
STORMONT	5	18	9.4	8.7	18.0	15.0	14.0	0.0	0
SUDBURY	17	21	4.7	5.9	15.0	6.0	3.0	0.0	0
THUNDER.BAY	2	0	0.0	0.0	0.0	0.0	0.0	0.0	0
TIMISKAMING	15	11	2.4	3.4	8.0	4.0	1.0	0.0	0
VICTORIA	71	17	2.7	3.6	7.0	4.0	2.0	0.0	0
WATERLOO	5	4	0.8	1.8	4.0	0.0	0.0	0.0	0
WELLINGTON	25	8	2.6	2.9	8.0	5.0	2.0	0.0	0
YORK	3	12	7.3	4.2	12.0	12.0	6.0	4.0	4

Table 12. Average and Location Measures for **Assisted Calving Rate (%)**, by County or District, Red Meat II, Cow-Calf Herd Health Option Participants, 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
ALGOMA	20	31	8.3	8.0	20.0	10.5	5.5	3.0	1
BRANT	7	21	8.7	7.4	21.0	15.0	6.0	3.0	0
BRUCE	140	100	11.5	12.9	22.0	15.0	9.0	4.0	0
COCHRANE	15	24	9.6	7.6	21.0	17.0	8.0	4.0	0
DUFFERIN	23	42	11.1	11.3	22.0	16.0	8.0	4.0	1
DUNDAS	6	33	14.0	10.8	33.0	20.0	10.5	6.0	4
DURHAM.E	10	20	8.0	6.1	16.5	12.0	7.5	5.0	0
DURHAM.W	21	27	7.1	8.2	18.0	10.0	4.0	0.0	0
ELGIN	25	26	8.7	7.9	20.0	14.0	8.0	2.0	0
ESSEX	3	25	12.3	12.5	25.0	25.0	12.0	0.0	0
FRONTENAC	23	36	12.9	9.6	29.0	17.0	12.0	6.0	2
GLENGARRY	16	45	12.5	12.9	36.0	17.0	11.5	1.5	0
GRENVILLE	9	33	15.7	13.7	33.0	30.0	14.0	3.0	0
GREY	103	44	12.5	9.5	26.0	18.0	10.0	6.0	2
HALTON	2	9	9.0	0.0	9.0	9.0	9.0	9.0	9
HASTINGS	29	30	6.7	7.6	19.0	12.0	4.0	0.0	0
HLDMND.NRFLK	11	21	8.3	6.8	18.0	12.0	8.0	2.0	0
HMLTN.WNTWRTH	5	15	9.2	5.8	15.0	13.0	10.0	8.0	0
HURON	59	100	11.7	14.1	23.0	15.0	8.0	5.0	0
KENT	8	14	9.1	3.6	14.0	11.5	9.5	7.0	3
LAMBTON	11	22	12.0	6.4	18.0	17.0	13.0	7.0	6
LANARK	60	50	8.2	8.6	16.5	12.0	7.5	1.0	0
LEEDS	12	53	15.8	16.2	36.0	24.5	10.5	5.5	0
LNNX.ADD	21	42	14.3	13.1	36.0	23.0	10.0	6.0	0
MANITOULIN	35	29	6.5	6.9	17.0	8.0	5.0	3.0	0
MIDDLESEX	21	29	9.9	9.3	26.0	13.0	6.0	4.0	0
MUSKOKA	1	22	22.0	.	22.0	22.0	22.0	22.0	22
NIAGARA	4	15	9.3	6.5	15.0	13.5	11.0	5.0	0
NIPISSING	7	17	4.0	7.0	17.0	11.0	0.0	0.0	0
NORTHUMBERLAND	18	58	13.4	12.3	25.0	17.0	8.5	7.0	6
OTTAWA.CARLTON	30	40	9.9	10.2	27.5	13.0	5.5	3.0	0
OXFORD	11	22	9.2	8.0	22.0	17.0	6.0	4.0	0
PARRYSOUND	1	6	6.0	.	6.0	6.0	6.0	6.0	6
PEEL	9	19	10.1	5.9	19.0	14.0	8.0	7.0	3
PERTH	26	85	13.5	17.3	32.0	17.0	9.0	3.0	0
PETERBOROUGH	63	32	9.5	8.1	19.0	15.0	8.0	4.0	0
PRESCOTT	14	22	10.9	5.9	18.0	16.0	10.5	6.0	6
PRINCE.EDWARD	8	25	9.3	10.8	25.0	20.0	4.5	0.0	0
RAINY.RIVER	8	32	11.9	9.7	32.0	16.5	8.5	5.0	3
RENFREW	125	40	9.2	8.0	20.0	12.0	8.0	4.0	0
RUSSELL	3	14	9.3	5.0	14.0	14.0	10.0	4.0	4
SIMCOE	43	27	7.5	7.3	17.0	11.0	6.0	2.0	0
STORMONT	5	14	11.0	3.2	14.0	13.0	12.0	10.0	6
SUDBURY	17	42	11.0	12.4	36.0	11.0	6.0	5.0	0
THUNDER.BAY	2	5	4.0	1.4	5.0	5.0	4.0	3.0	3
TIMISKAMING	15	46	11.5	11.6	23.0	16.0	9.0	4.0	2
VICTORIA	71	62	12.3	13.3	29.0	16.0	9.0	2.0	0
WATERLOO	5	36	19.2	10.0	36.0	21.0	14.0	13.0	12
WELLINGTON	25	31	8.0	7.6	14.0	11.0	8.0	3.0	0
YORK	3	12	9.0	3.0	12.0	12.0	9.0	6.0	6

Table 13. Average and Location Measures for Calf Mortality Rate (%), by County or District, Red Meat II, Cow-Calf Herd Health Option Participants, 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
ALGOMA	17	27	5.5	6.7	14.0	7.0	3.0	2	0
BRANT	7	15	3.4	6.1	15.0	9.0	0.0	0	0
BRUCE	135	31	3.7	5.3	10.0	6.0	1.0	0	0
COCHRANE	15	14	4.3	4.4	10.0	9.0	3.0	0	0
DUFFERIN	22	21	5.5	6.7	15.0	10.0	2.5	0	0
DUNDAS	6	17	8.0	7.6	17.0	15.0	8.0	0	0
DURHAM.E	10	9	2.8	3.7	8.0	7.0	0.0	0	0
DURHAM.W	21	32	7.0	8.6	20.0	8.0	4.0	0	0
ELGIN	23	23	2.7	5.3	8.0	3.0	0.0	0	0
ESSEX	3	56	21.3	30.3	56.0	56.0	8.0	0	0
FRONTENAC	23	22	4.2	6.7	14.0	8.0	0.0	0	0
GLENGARRY	16	39	4.3	10.7	20.0	0.0	0.0	0	0
GRENVILLE	8	17	5.5	5.9	17.0	8.0	5.5	0	0
GREY	100	66	4.7	9.1	9.5	5.0	2.0	0	0
HALTON	2	0	0.0	0.0	0.0	0.0	0.0	0	0
HASTINGS	29	27	4.4	8.2	25.0	4.0	0.0	0	0
HLDMND.NRFLK	10	8	1.8	3.3	8.0	2.0	0.0	0	0
HMLTN.WNTWRTH	5	22	11.4	8.2	22.0	17.0	11.0	4	3
HURON	55	23	3.5	5.4	10.0	5.0	0.0	0	0
KENT	9	25	4.9	8.5	25.0	3.0	1.0	0	0
LAMBTON	12	12	4.6	3.9	8.0	7.0	5.5	0	0
LANARK	56	33	4.9	7.1	11.0	7.0	3.5	0	0
LEEDS	11	15	6.3	4.9	14.0	8.0	7.0	3	0
LNNX.ADD	20	30	6.1	8.3	19.0	7.0	4.0	0	0
MANITOULIN	32	39	4.9	7.9	12.0	6.5	2.5	0	0
MIDDLESEX	21	31	5.8	8.0	16.0	9.0	3.0	0	0
MUSKOKA	1	0	0.0	.	0.0	0.0	0.0	0	0
NIAGARA	4	12	3.0	6.0	12.0	6.0	0.0	0	0
NIPISSING	7	0	0.0	0.0	0.0	0.0	0.0	0	0
NORTHUMBERLAND	18	14	3.2	4.6	14.0	5.0	0.5	0	0
OTTAWA.CARLTON	29	14	3.5	3.9	10.0	5.0	3.0	0	0
OXFORD	10	10	1.7	3.1	6.5	2.0	0.0	0	0
PARRYSOUND	0	.	.	.	.	.	.	.	.
PEEL	9	12	3.2	4.4	12.0	6.0	0.0	0	0
PERTH	27	26	3.9	6.2	11.0	6.0	0.0	0	0
PETERBOROUGH	64	33	4.5	6.1	12.0	7.0	2.0	0	0
PRESCOTT	11	24	3.4	7.3	8.0	3.0	0.0	0	0
PRINCE.EDWARD	6	5	0.8	2.0	5.0	0.0	0.0	0	01
RAINY.RIVER	8	6	1.5	2.7	6.0	3.0	0.0	0	0
RENFREW	121	24	4.1	5.4	11.0	7.0	2.0	0	0
RUSSELL	3	17	5.7	9.8	17.0	17.0	0.0	0	0
SIMCOE	43	12	2.9	3.3	8.0	5.0	2.0	0	0
STORMONT	3	11	3.7	6.4	11.0	11.0	0.0	0	0
SUDBURY	17	23	5.8	7.9	17.0	11.0	0.0	0	0
THUNDER.BAY	2	2	1.0	1.4	2.0	2.0	1.0	0	0
TIMISKAMING	15	21	5.7	7.1	17.0	11.0	2.0	0	0
VICTORIA	71	26	2.8	5.4	8.0	3.0	0.0	0	0
WATERLOO	5	3	0.6	1.3	3.0	0.0	0.0	0	0
WELLINGTON	25	19	4.6	6.0	15.0	7.0	2.0	0	0
YORK	2	0	0.0	0.0	0.0	0.0	0.0	0	0

Table 14. Average and Location Measures for Calf Treatment Rate (%), by County or District, Red Meat II, Cow-Calf Herd Health Option Participants, 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
ALGOMA	19	56	18.2	20.2	54	33.0	11.0	1.0	0
BRANT	6	34	11.7	12.5	34	13.0	11.5	0.0	0
BRUCE	137	93	15.1	15.9	34	21.0	10.0	4.0	0
COCHRANE	15	100	35.8	37.8	100	60.0	19.0	3.0	0
DUFFERIN	22	100	19.5	23.5	46	25.0	12.5	2.0	0
DUNDAS	6	100	47.7	42.5	100	100.0	33.5	16.0	3
DURHAM.E	10	32	10.9	10.7	27	18.0	8.5	0.0	0
DURHAM.W	21	100	18.0	28.3	31	16.0	11.0	4.0	0
ELGIN	24	48	12.9	12.4	24	16.5	11.0	4.0	0
ESSEX	3	17	8.3	8.5	17	17.0	8.0	0.0	0
FRONTENAC	23	100	25.5	34.8	93	37.0	11.0	2.0	0
GLENGARRY	16	100	29.9	36.7	100	38.5	14.0	5.5	0
GRENVILLE	9	100	37.1	38.3	100	44.0	31.0	10.0	0
GREY	101	100	18.4	20.2	43	23.0	14.0	5.0	0
HALTON	2	4	2.0	2.8	4	4.0	2.0	0.0	0
HASTINGS	29	100	16.4	26.7	45	21.0	5.0	0.0	0
HLDMND.NRFLK	11	132	28.2	37.1	50	28.0	15.0	8.0	7
HMLTN.WNTWRTH	5	100	32.8	38.6	100	26.0	19.0	17.0	2
HURON	55	100	22.4	30.3	100	23.0	11.0	4.0	0
KENT	8	31	9.5	9.6	31	12.0	6.5	4.0	0
LAMBTON	11	100	22.6	28.7	35	30.0	19.0	3.0	0
LANARK	60	105	19.7	29.1	71	23.5	8.0	0.0	0
LEEDS	11	100	21.0	27.7	29	20.0	13.0	7.0	0
LNNX.ADD	21	100	16.4	21.7	29	19.0	14.0	4.0	0
MANITOULIN	35	90	15.9	19.3	47	24.0	9.0	4.0	0
MIDDLESEX	21	100	22.4	26.8	47	29.0	19.0	4.0	0
MUSKOKA	1	100	100.0	.	100	100.0	100.0	100.0	100
NIAGARA	4	50	30.8	14.2	50	40.0	28.5	21.5	16
NIPISSING	8	100	58.9	46.7	100	100.0	79.5	6.0	0
NORTHUMBERLAND	17	100	18.6	31.5	100	19.0	8.0	0.0	0
OTTAWA.CARLTON	30	100	23.2	28.6	69	36.0	11.5	4.0	0
OXFORD	11	100	28.5	36.6	100	32.0	13.0	7.0	0
PARRYSOUND	1	0	0.0	.	0	0.0	0.0	0.0	0
PEEL	7	100	41.0	42.5	100	100.0	29.0	0.0	0
PERTH	25	100	22.0	26.9	72	26.0	14.0	5.0	0
PETERBOROUGH	63	100	18.2	26.1	51	21.0	8.0	5.0	0
PRESCOTT	14	94	18.8	25.1	39	32.0	9.0	4.0	0
PRINCE.EDWARD	8	100	25.1	31.9	100	27.0	13.0	8.5	4
RAINY.RIVER	7	100	28.9	35.3	100	45.0	20.0	2.0	2
RENFREW	121	104	19.5	27.5	53	23.0	9.0	0.0	0
RUSSELL	2	0	0.0	0.0	0	0.0	0.0	0.0	0
SIMCOE	40	100	19.8	29.9	75	21.5	8.0	1.0	0
STORMONT	5	58	16.2	23.9	58	11.0	10.0	2.0	0
SUDBURY	17	38	8.4	11.8	30	14.0	3.0	0.0	0
THUNDER.BAY	2	42	33.5	12.0	42	42.0	33.5	25.0	25
TIMISKAMING	15	100	25.3	26.7	74	26.0	17.0	11.0	5
VICTORIA	70	100	25.7	29.5	76	38.0	13.5	5.0	0
WATERLOO	4	97	34.8	41.9	97	58.5	18.0	11.0	6
WELLINGTON	25	100	22.9	31.8	85	26.0	6.0	4.0	0
YORK	3	47	22.3	23.6	47	47.0	20.0	0.0	0

Table 15. Average and Location Measures for **Weaned Calf Crop Rate (%)**, by County or District, Red Meat II, Cow-Calf Herd Health Option Participants, 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
ALGOMA	20	111	86.5	10.7	99.5	91.5	87.5	79.5	75.0
BRANT	7	94	79.7	14.4	94.0	91.0	88.0	66.0	58.0
BRUCE	139	107	89.1	9.0	100.0	96.0	90.0	84.0	76.0
COCHRANE	15	100	84.4	9.6	96.0	92.0	85.0	76.0	72.0
DUFFERIN	23	100	85.4	10.1	96.0	94.0	86.0	79.0	74.0
DUNDAS	6	96	82.7	14.6	96.0	95.0	87.0	71.0	60.0
DURHAM.E	11	100	91.5	8.7	100.0	100.0	93.0	87.0	83.0
DURHAM.W	21	100	86.3	10.7	96.0	94.0	88.0	83.0	71.0
ELGIN	25	140	92.5	13.9	106.0	97.0	92.0	86.0	74.0
ESSEX	3	85	70.0	22.6	85.0	85.0	81.0	44.0	44.0
FRONTENAC	23	104	88.6	12.0	100.0	100.0	90.0	83.0	71.0
GLENGARRY	16	100	87.9	16.9	100.0	100.0	93.5	82.5	60.0
GRENVILLE	9	110	87.9	11.0	110.0	92.0	84.0	82.0	75.0
GREY	104	114	88.0	11.5	100.0	94.0	90.0	84.0	76.0
HALTON	2	96	96.0	0.0	96.0	96.0	96.0	96.0	96.0
HASTINGS	29	107	90.2	9.1	100.0	96.0	92.0	86.0	76.0
HLDMND.NRFLK	11	129	92.4	15.3	100.0	100.0	93.0	85.0	75.0
HMLTN.WNTWRTH	5	79	68.6	11.4	79.0	76.0	71.0	67.0	50.0
HURON	60	105	88.3	10.3	100.0	95.0	89.0	82.5	76.0
KENT	10	100	85.9	11.0	98.0	94.0	90.5	74.0	71.0
LAMBTON	12	99	88.1	8.6	97.0	95.0	90.5	81.0	76.0
LANARK	60	108	87.4	11.8	100.0	96.0	89.0	81.5	67.0
LEEDS	11	96	79.2	10.8	90.0	90.0	79.0	70.0	65.0
LNNX.ADD	21	100	85.6	14.9	98.0	97.0	90.0	83.0	67.0
MANITOULIN	35	100	87.4	8.3	96.0	94.0	90.0	80.0	75.0
MIDDLESEX	21	100	85.8	13.4	100.0	95.0	87.0	83.0	73.0
MUSKOKA	1	76	76.0	.	76.0	76.0	76.0	76.0	76.0
NIAGARA	4	100	96.0	8.0	100.0	100.0	100.0	92.0	84.0
NIPISSING	9	104	93.4	16.7	104.0	100.0	100.0	97.0	50.0
NORTHUMBERLAND	18	100	89.4	7.7	100.0	95.0	90.5	86.0	75.0
OTTAWA.CARLTON	30	100	87.0	7.9	97.5	93.0	86.5	83.0	75.5
OXFORD	11	100	91.7	7.8	100.0	100.0	93.0	84.0	84.0
PARRYSOUND	1	100	100.0	.	100.0	100.0	100.0	100.0	100.0
PEEL	9	107	89.1	8.9	107.0	93.0	90.0	82.0	77.0
PERTH	27	105	90.3	10.4	100.0	100.0	92.0	85.0	74.0
PETERBOROUGH	64	116	88.3	9.9	99.0	93.0	89.0	84.5	77.0
PRESCOTT	14	100	90.1	9.5	100.0	100.0	92.0	86.0	77.0
PRINCE.EDWARD	7	100	88.6	12.9	100.0	100.0	93.0	75.0	69.0
RAINY.RIVER	8	92	85.5	4.9	92.0	88.5	86.5	82.5	77.0
RENFREW	126	108	88.3	10.4	100.0	95.0	90.0	83.0	76.0
RUSSELL	3	92	86.7	8.4	92.0	92.0	91.0	77.0	77.0
SIMCOE	44	122	91.3	9.4	100.0	95.5	92.0	87.5	80.0
STORMONT	5	186	115.2	39.8	186.0	100.0	100.0	100.0	90.0
SUDBURY	17	100	83.5	10.5	95.0	92.0	84.0	74.0	68.0
THUNDER.BAY	2	95	89.0	8.5	95.0	95.0	89.0	83.0	83.0
TIMISKAMING	15	100	87.6	10.9	100.0	97.0	90.0	79.0	71.0
VICTORIA	71	107	90.9	10.6	100.0	97.0	93.0	87.0	80.0
WATERLOO	5	100	92.0	6.1	100.0	97.0	89.0	88.0	86.0
WELLINGTON	25	100	89.4	6.9	96.0	95.0	91.0	85.0	78.0
YORK	3	90	81.7	8.5	90.0	90.0	82.0	73.0	73.0

Table 16. Average and Location Measures for 200Day Adjusted Weaning Weight (lbs), by County or District, Red Meat II, Cow-Calf Herd Health Option Participants, 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
ALGOMA	20	608	549.2	49.9	599.0	588.0	565.0	521.0	482.5
BRANT	7	690	570.9	68.3	690.0	617.0	562.0	534.0	473.0
BRUCE	133	710	517.8	66.3	596.0	563.0	512.0	470.0	435.0
COCHRANE	15	622	560.3	40.5	616.0	600.0	553.0	526.0	514.0
DUFFERIN	23	623	536.5	63.9	608.0	584.0	551.0	504.0	436.0
DUNDAS	6	705	594.2	76.9	705.0	679.0	552.5	539.0	537.0
DURHAM.E	11	708	556.2	80.1	606.0	606.0	584.0	482.0	465.0
DURHAM.W	21	655	537.3	62.2	608.0	565.0	545.0	492.0	476.0
ELGIN	25	622	515.0	71.2	600.0	570.0	509.0	485.0	400.0
ESSEX	3	567	534.0	31.6	567.0	567.0	531.0	504.0	504.0
FRONTENAC	23	668	560.9	62.5	620.0	608.0	569.0	529.0	475.0
GLENGARRY	16	732	573.6	74.9	659.0	616.5	585.0	512.5	478.0
GRENVILLE	9	675	554.4	84.5	675.0	613.0	574.0	476.0	423.0
GREY	106	744	549.9	75.5	650.0	606.0	552.0	495.0	449.0
HALTON	2	617	576.0	57.9	617.0	617.0	576.0	535.0	535.0
HASTINGS	28	756	556.6	92.9	673.0	617.5	571.0	467.0	432.0
HLDMND.NRFLK	11	638	528.5	51.4	569.0	562.0	534.0	481.0	474.0
HMLTN.WNTWRTH	5	675	510.4	126.3	675.0	562.0	519.0	464.0	332.0
HURON	60	722	533.1	73.3	634.0	590.0	519.5	476.5	447.0
KENT	10	569	487.4	57.8	562.5	547.0	485.5	432.0	411.0
LAMBTON	11	664	552.3	60.3	608.0	597.0	549.0	506.0	499.0
LANARK	60	680	542.1	62.7	635.0	574.5	539.5	505.0	457.5
LEEDS	11	706	597.5	68.2	670.0	636.0	602.0	540.0	501.0
LNNX.ADD	21	705	537.9	74.7	637.0	560.0	546.0	477.0	450.0
MANITOULIN	33	686	513.3	67.3	594.0	559.0	506.0	465.0	429.0
MIDDLESEX	20	750	552.2	92.8	699.0	584.5	544.0	490.5	442.5
MUSKOKA	0	.	.	.	.	.	.	.	.
NIAGARA	4	660	585.8	70.7	660.0	644.0	588.5	527.5	506.0
NIPISSING	9	601	536.7	63.6	601.0	588.0	583.0	466.0	459.0
NORTHUMBERLAND	17	658	584.7	55.0	655.0	614.0	592.0	552.0	494.0
OTTAWA.CARLTON	30	732	575.1	75.2	689.5	604.0	569.0	534.0	505.5
OXFORD	11	655	515.7	75.9	596.0	563.0	515.0	431.0	425.0
PARRYSOUND	1	663	663.0	.	663.0	663.0	663.0	663.0	663.0
PEEL	10	755	591.1	84.1	730.5	618.0	574.0	530.0	505.5
PERTH	27	686	529.9	70.0	640.0	573.0	533.0	507.0	431.0
PETERBOROUGH	63	801	561.0	69.2	630.0	607.0	560.0	519.0	480.0
PRESCOTT	14	586	509.2	51.6	560.0	552.0	510.5	481.0	458.0
PRINCE.EDWARD	7	638	548.1	53.9	638.0	589.0	524.0	497.0	495.0
RAINY.RIVER	8	627	570.9	35.2	627.0	596.0	567.0	541.0	532.0
RENFREW	126	750	537.7	63.2	610.0	577.0	542.0	502.0	451.0
RUSSELL	3	589	547.0	54.8	589.0	589.0	567.0	485.0	485.0
SIMCOE	44	773	557.9	79.4	640.0	584.5	553.5	517.5	468.0
STORMONT	5	678	603.0	73.4	678.0	670.0	609.0	544.0	514.0
SUDBURY	17	644	558.5	41.5	635.0	581.0	543.0	528.0	513.0
THUNDER.BAY	2	786	636.0	212.1	786.0	786.0	636.0	486.0	486.0
TIMISKAMING	14	716	571.3	71.8	661.0	621.0	567.5	512.0	476.0
VICTORIA	71	786	542.3	72.5	632.0	592.0	520.0	491.0	453.0
WATERLOO	5	615	525.6	67.7	615.0	553.0	540.0	480.0	440.0
WELLINGTON	24	760	567.7	82.6	695.0	612.0	552.5	512.0	470.0
YORK	3	657	589.7	98.9	657.0	657.0	636.0	476.0	476.0

Table 17. Average and Location Measures for (Adjusted) **Weaning Weight of Calf Per Cow Exposed to Mating (lbs)**, by County or District, Red Meat II, Cow-Calf Herd Health Option Participants, 1989

	NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
ALGOMA	20	603	473.9	58.9	551.5	519.5	474.5	436.0	398.5
BRANT	7	649	458.9	117.6	649.0	561.0	426.0	362.0	312.0
BRUCE	133	703	461.0	74.3	542.0	512.0	461.0	409.0	368.0
COCHRANE	15	578	473.5	71.0	575.0	531.0	490.0	411.0	378.0
DUFFERIN	23	577	456.9	66.9	528.0	513.0	458.0	421.0	363.0
DUNDAS	6	581	489.7	88.0	581.0	543.0	502.0	485.0	325.0
DURHAM.E	10	614	509.3	77.4	610.0	591.0	501.5	438.0	413.0
DURHAM.W	21	607	464.3	83.6	565.0	514.0	475.0	400.0	339.0
ELGIN	25	833	480.8	120.5	659.0	536.0	455.0	400.0	364.0
ESSEX	3	449	370.3	104.3	449.0	449.0	410.0	252.0	252.0
FRONTENAC	23	620	496.0	83.9	612.0	566.0	495.0	427.0	386.0
GLENGARRY	16	732	507.9	132.1	659.0	594.0	550.5	418.0	293.0
GRENVILLE	9	660	488.8	105.7	660.0	531.0	506.0	389.0	365.0
GREY	103	800	484.6	95.8	623.0	541.0	475.0	429.0	376.0
HALTON	2	590	551.5	54.4	590.0	590.0	551.5	513.0	513.0
HASTINGS	28	652	504.1	86.2	638.0	575.5	517.0	443.5	401.0
HLDMND.NRFLK	11	707	486.2	83.9	569.0	481.0	453.0	447.0	444.0
HMLTN.WNTWRTH	5	532	360.4	134.8	532.0	398.0	397.0	309.0	166.0
HURON	60	733	472.0	93.0	603.5	511.0	464.5	406.0	371.0
KENT	10	494	416.3	55.1	492.0	451.0	400.5	394.0	349.5
LAMBTON	11	621	480.3	63.2	537.0	513.0	478.0	424.0	421.0
LANARK	60	646	474.3	87.3	575.5	529.0	494.0	419.0	373.0
LEEDS	11	635	477.5	103.4	606.0	567.0	489.0	403.0	332.0
LNNX.ADD	21	661	462.9	104.9	549.0	534.0	470.0	429.0	378.0
MANITOULIN	33	568	449.5	65.1	536.0	493.0	455.0	406.0	375.0
MIDDLESEX	20	750	473.7	118.9	629.5	520.5	474.0	411.0	348.0
MUSKOKA	0	.	.	.	.	.	.	.	.
NIAGARA	4	660	564.5	94.3	660.0	644.0	567.0	485.0	464.0
NIPISSING	9	612	504.6	116.1	612.0	583.0	539.0	465.0	233.0
NORTHUMBERLAND	17	645	521.9	64.5	612.0	545.0	522.0	479.0	453.0
OTTAWA.CARLTON	29	725	497.0	78.9	556.0	537.0	503.0	449.0	415.0
OXFORD	11	586	472.0	71.5	563.0	539.0	451.0	425.0	410.0
PARRYSOUND	1	663	663.0	.	663.0	663.0	663.0	663.0	663.0
PEEL	9	807	530.0	126.2	807.0	518.0	475.0	472.0	402.0
PERTH	27	611	476.0	73.4	595.0	539.0	474.0	413.0	369.0
PETERBOROUGH	63	785	497.1	97.8	598.0	557.0	494.0	425.0	384.0
PRESCOTT	14	528	457.1	50.5	500.0	500.0	468.5	425.0	389.0
PRINCE.EDWARD	7	638	487.7	104.6	638.0	589.0	476.0	373.0	356.0
RAINY.RIVER	8	526	485.5	25.4	526.0	500.5	490.0	463.0	451.0
RENFREW	126	750	474.7	77.7	566.0	526.0	473.0	433.0	386.0
RUSSELL	3	535	476.0	89.5	535.0	535.0	520.0	373.0	373.0
SIMCOE	44	677	508.2	82.4	631.0	554.0	506.0	454.5	386.0
STORMONT	5	1259	708.4	316.2	1259.0	670.0	609.0	514.0	490.0
SUDBURY	17	548	466.4	64.6	544.0	525.0	477.0	424.0	358.0
THUNDER.BAY	2	655	558.5	136.5	655.0	655.0	558.5	462.0	462.0
TIMISKAMING	14	630	496.7	91.6	621.0	561.0	495.5	419.0	403.0
VICTORIA	71	689	494.7	90.3	590.0	564.0	485.0	436.0	400.0
WATERLOO	5	615	486.6	89.3	615.0	524.0	487.0	413.0	394.0
WELLINGTON	24	661	505.8	82.4	635.0	563.5	486.5	448.0	395.0
YORK	3	541	477.3	58.5	541.0	541.0	465.0	426.0	426.0

Section 5

Beef Cow-Calf Herds

Frequency Distributions
Shown by Figures
for Herd Performance
All Participating Herds

Figure 1. Distribution of Number HEIFERS in 1989

```
  Percentage

   |              ***
16 +  ***         ***
   |  ***         ***
   |  ***         ***
   |  ***         ***
14 +  ***         ***
   |  ***   ***   ***   ***
   |  ***   ***   ***   ***
   |  ***   ***   ***   ***
12 +  ***   ***   ***   ***
   |  ***   ***   ***   ***
   |  ***   ***   ***   ***
   |  ***   ***   ***   ***
10 +  ***   ***   ***   ***
   |  ***   ***   ***   ***   ***
   |  ***   ***   ***   ***   ***
   |  ***   ***   ***   ***   ***
 8 +  ***   ***   ***   ***   ***
   |  ***   ***   ***   ***   ***   ***
   |  ***   ***   ***   ***   ***   ***
   |  ***   ***   ***   ***   ***   ***
 6 +  ***   ***   ***   ***   ***   ***
   |  ***   ***   ***   ***   ***   ***                                     ***
   |  ***   ***   ***   ***   ***   ***                                     ***
   |  ***   ***   ***   ***   ***   ***   ***                               ***
 4 +  ***   ***   ***   ***   ***   ***   ***   ***                         ***
   |  ***   ***   ***   ***   ***   ***   ***   ***                         ***
   |  ***   ***   ***   ***   ***   ***   ***   ***   ***                   ***
   |  ***   ***   ***   ***   ***   ***   ***   ***   ***         ***       ***
 2 +  ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***       ***
   |  ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***
   |  ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***
   |  ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***
 ----------------------------------------------------------------------------------
       0     2     4     6     8    10    12    14    16    18    20    22    24

                          Heifers - Midpoint

        NUMBER  MAX  AVERAGE  STD  PCTL90  PCTL75  MEDIAN  PCTL25  PCTL10
         1187   104    8.5    9.5    18      11       6       3       0
```

Figure 2. Distribution of Number of COWS in 1989

```
 Percentage

   |  ***  ***
   |  ***  ***
22 +  ***  ***
   |  ***  ***
   |  ***  ***
   |  ***  ***
20 +  ***  ***
   |  ***  ***
   |  ***  ***
   |  ***  ***
18 +  ***  ***
   |  ***  ***
   |  ***  ***
   |  ***  ***
16 +  ***  ***
   |  ***  ***
   |  ***  ***
   |  ***  ***  ***
14 +  ***  ***  ***
   |  ***  ***  ***
   |  ***  ***  ***
   |  ***  ***  ***  ***
12 +  ***  ***  ***  ***
   |  ***  ***  ***  ***
   |  ***  ***  ***  ***
   |  ***  ***  ***  ***
10 +  ***  ***  ***  ***
   |  ***  ***  ***  ***
   |  ***  ***  ***  ***
   |  ***  ***  ***  ***  ***
 8 +  ***  ***  ***  ***  ***
   |  ***  ***  ***  ***  ***
   |  ***  ***  ***  ***  ***
   |  ***  ***  ***  ***  ***
 6 +  ***  ***  ***  ***  ***
   |  ***  ***  ***  ***  ***
   |  ***  ***  ***  ***  ***  ***
   |  ***  ***  ***  ***  ***  ***
 4 +  ***  ***  ***  ***  ***  ***  ***
   |  ***  ***  ***  ***  ***  ***  ***
   |  ***  ***  ***  ***  ***  ***  ***
   |  ***  ***  ***  ***  ***  ***  ***                                ***
 2 +  ***  ***  ***  ***  ***  ***  ***  ***                           ***
   |  ***  ***  ***  ***  ***  ***  ***  ***  ***                      ***
   |  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***       ***  ***  ***
   |  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***
   -------------------------------------------------------------------------
       15   25   35   45   55   65   75   85   95  105  110  115  125  150

                                 Cows - Midpoint

                NUMBER MAX AVERAGE STD  PCTL90 PCTL75 MEDIAN PCTL25 PCTL10
                 1220  427   43.2  36.5  80.5   53      33     21     14
```

Figure 3. Distribution of Number of BULLS in 1989

```
Percentage

 45 +        ****
    |        ****
    |        ****
    |        ****
    |        ****
 40 +        ****
    |        ****
    |        ****
    |        ****
    |        ****
 35 +        ****
    |        ****
    |        ****
    |        ****
    |        ****
 30 +        ****
    |        ****
    |        ****
    |        ****  ****
    |        ****  ****
 25 +        ****  ****
    |        ****  ****
    |        ****  ****
    |        ****  ****
    |        ****  ****
 20 +        ****  ****
    |        ****  ****
    |        ****  ****
    |        ****  ****
    |        ****  ****
 15 +        ****  ****
    |        ****  ****
    |        ****  ****
    |        ****  ****
    |        ****  ****
 10 +        ****  ****
    |  ****  ****  ****  ****
    |  ****  ****  ****  ****
    |  ****  ****  ****  ****
    |  ****  ****  ****  ****
  5 +  ****  ****  ****  ****
    |  ****  ****  ****  ****  ****
    |  ****  ****  ****  ****  ****
    |  ****  ****  ****  ****  ****  ****
    |  ****  ****  ****  ****  ****  ****  ****  ****  ****        ****
    ------------------------------------------------------------------------
        0     1     2     3     4     5     6     7     8     9    10

                              Bulls Midpoint

         NUMBER MAX AVERAGE STD PCTL90 PCTL75 MEDIAN PCTL25 PCTL10
          1192   25   1.9   2.2   4      2      1      1      1
```

Figure 4. Distribution of Number Cows EXPOSED to Mating in 1989

```
Percentage

   |  ***
20 +  ***  ***
   |  ***  ***
   |  ***  ***
   |  ***  ***
18 +  ***  ***
   |  ***  ***
   |  ***  ***
   |  ***  ***
16 +  ***  ***  ***
   |  ***  ***  ***
   |  ***  ***  ***
   |  ***  ***  ***
14 +  ***  ***  ***
   |  ***  ***  ***
   |  ***  ***  ***  ***
   |  ***  ***  ***  ***
12 +  ***  ***  ***  ***
   |  ***  ***  ***  ***
   |  ***  ***  ***  ***
   |  ***  ***  ***  ***
10 +  ***  ***  ***  ***
   |  ***  ***  ***  ***  ***
   |  ***  ***  ***  ***  ***
   |  ***  ***  ***  ***  ***
 8 +  ***  ***  ***  ***  ***
   |  ***  ***  ***  ***  ***
   |  ***  ***  ***  ***  ***
   |  ***  ***  ***  ***  ***
 6 +  ***  ***  ***  ***  ***
   |  ***  ***  ***  ***  ***
   |  ***  ***  ***  ***  ***  ***
   |  ***  ***  ***  ***  ***  ***
 4 +  ***  ***  ***  ***  ***  ***  ***
   |  ***  ***  ***  ***  ***  ***  ***
   |  ***  ***  ***  ***  ***  ***  ***  ***                           ***
   |  ***  ***  ***  ***  ***  ***  ***  ***                           ***
 2 +  ***  ***  ***  ***  ***  ***  ***  ***                      ***  ***
   |  ***  ***  ***  ***  ***  ***  ***  ***  ***                 ***  ***
   |  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***
   |  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***
   --------------------------------------------------------------------------
       15   25   35   45   55   65   75   85   95  105  110  115  125  150

                          Cows Exposed - Midpoint

             NUMBER MAX AVERAGE STD  PCTL90 PCTL75 MEDIAN PCTL25 PCTL10
              1224  521  47.1   40.4   90     57     36     23     16
```

Figure 5. Distribution of Number of Calves WEANED in 1989

```
Percentage

30 +
   |
   |
   |
   |   ***
25 +   ***
   |   ***
   |   ***
   |   ***   ***
   |   ***   ***
20 +   ***   ***
   |   ***   ***
   |   ***   ***
   |   ***   ***
   |   ***   ***   ***
15 +   ***   ***   ***
   |   ***   ***   ***
   |   ***   ***   ***
   |   ***   ***   ***
   |   ***   ***   ***   ***
10 +   ***   ***   ***   ***
   |   ***   ***   ***   ***
   |   ***   ***   ***   ***   ***
   |   ***   ***   ***   ***   ***
   |   ***   ***   ***   ***   ***
 5 +   ***   ***   ***   ***   ***
   |   ***   ***   ***   ***   ***   ***
   |   ***   ***   ***   ***   ***   ***   ***
   |   ***   ***   ***   ***   ***   ***   ***   ***   ***                     ***
   |   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***
   ---------------------------------------------------------------------------------
        15    25    35    45    55    65    75    85    95   105   115   125   150

                           Calves Weaned - Midpoint

           NUMBER MAX AVERAGE STD  PCTL90 PCTL75 MEDIAN PCTL25 PCTL10
            1224  427   41.4  35.6   79     50     31     20     14
```

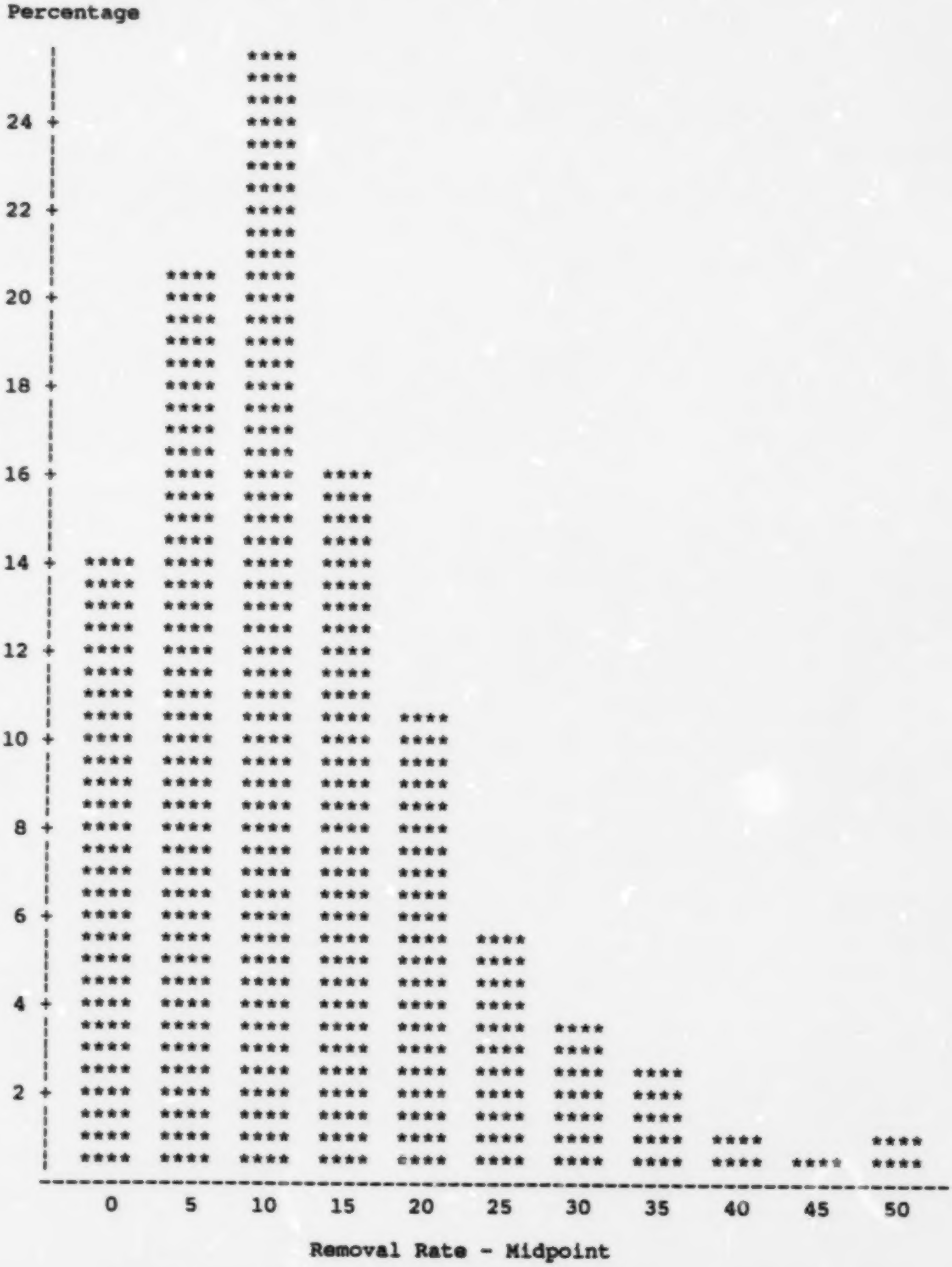
Figure 6. Distribution of CALVING SPREAD (days) in 1989

```
  Percentage

   |            ***
   |            ***  ***
16 +            ***  ***
   |            ***  ***
   |            ***  ***
   |            ***  ***
14 +            ***  ***
   |            ***  ***
   |            ***  ***
   |            ***  ***
12 +            ***  ***
   |            ***  ***
   |            ***  ***  ***
   |            ***  ***  ***
10 +       ***  ***  ***  ***
   |       ***  ***  ***  ***
   |       ***  ***  ***  ***
   |       ***  ***  ***  ***
 8 +       ***  ***  ***  ***
   |       ***  ***  ***  ***  ***
   |       ***  ***  ***  ***  ***  ***                           ***
   |       ***  ***  ***  ***  ***  ***                           ***
 6 +       ***  ***  ***  ***  ***  ***                           ***
   |       ***  ***  ***  ***  ***  ***  ***                      ***
   |       ***  ***  ***  ***  ***  ***  ***                      ***
   |  ***  ***  ***  ***  ***  ***  ***  ***                      ***
 4 +  ***  ***  ***  ***  ***  ***  ***  ***       ***            ***
   |  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***       ***
   |  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***       ***
   |  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***       ***
 2 +  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***
   |  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***
   |  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***
   |  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***
   ---------------------------------------------------------------------
       32   53   75   97  119  143  165  187  209  231  253  275  297

                    Calving Spread (days) - Midpoint

        NUMBER MAX AVERAGE STD   PCTL90 PCTL75 MEDIAN PCTL25 PCTL10
         1196  365  136.9  79.9  260     180    111     78     56
```

Figure 7. Distribution of OPEN RATE (%) in 1989

```
  Percentage

  40 +   ****
     |   ****
     |   ****
     |   ****
     |   ****
  35 +   ****
     |   ****
     |   ****
     |   ****
     |   ****
  30 +   ****
     |   ****
     |   ****
     |   ****
     |   ****
  25 +   ****
     |   ****
     |   ****
     |   ****
     |   ****
  20 +   ****
     |   ****
     |   ****
     |   ****          ****
     |   ****          ****
  15 +   ****          ****
     |   ****          ****
     |   ****          ****
     |   ****          ****
     |   ****   ****   ****   ****
  10 +   ****   ****   ****   ****
     |   ****   ****   ****   ****
     |   ****   ****   ****   ****   ****
     |   ****   ****   ****   ****   ****
     |   ****   ****   ****   ****   ****
   5 +   ****   ****   ****   ****   ****   ****
     |   ****   ****   ****   ****   ****   ****
     |   ****   ****   ****   ****   ****   ****   ****
     |   ****   ****   ****   ****   ****   ****   ****   ****                 ****
     |   ****   ****   ****   ****   ****   ****   ****   ****   ****   ****   ****
     |
     -------------------------------------------------------------------------------
          0      2      4      6      8     10     12     14     16     18     20

                              Open Rate - Midpoint

  NUMBER MAX AVERAGE STD PCTL90 PCTL75 MEDIAN PCTL25 PCTL10
   1220   46   4.1   5.3   10      6      3      0      0
```

Figure 8. Distribution of REMOVAL RATE (%) in 1989



NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
1200	72	12.5	10.1	26	17	11	6	0

Figure 9. Distribution of CALVING RATE (%) in 1989

```
  Percentage

   |                                                   *****
   |                                                   *****
   |                                                   *****
   |                                                   *****
35 +                                                   *****
   |                                                   *****
   |                                                   *****
   |                                                   *****
   |                                                   *****
30 +                                                   *****
   |                                                   *****
   |                                                   *****
   |                                                   *****
   |                                                   *****
25 +                                                   *****
   |                                            *****  *****
   |                                            *****  *****
   |                                            *****  *****
   |                                            *****  *****
20 +                                            *****  *****
   |                                            *****  *****
   |                                            *****  *****
   |                                            *****  *****
   |                                            *****  *****
15 +                                            *****  *****
   |                                            *****  *****
   |                                     *****  *****  *****
   |                                     *****  *****  *****
   |                                     *****  *****  *****
10 +                                     *****  *****  *****
   |                                     *****  *****  *****
   |                                     *****  *****  *****
   |                                     *****  *****  *****  *****
   |                              *****  *****  *****  *****  *****
 5 +                              *****  *****  *****  *****  *****
   |                              *****  *****  *****  *****  *****
   |                       *****  *****  *****  *****  *****  *****
   |         *****  *****  *****  *****  *****  *****  *****  *****
   |  *****  *****  *****  *****  *****  *****  *****  *****  *****  *****
   ---------------------------------------------------------------------
       65     70     75     80     85     90     95    100    105    110

                        Calving Rate - Midpoint

          NUMBER MAX AVERAGE STD PCTL90 PCTL75 MEDIAN PCTL25 PCTL10
           1217  135   95.0  8.8  102    100     97     92     84
```

Figure 10. Distribution of LIVEBORN CALVING RATE (%) in 1989

```
Percentage

30 +
   |
   |                                                           *****
   |                                                           *****   *****
   |                                                           *****   *****
25 +                                                           *****   *****
   |                                                           *****   *****
   |                                                           *****   *****
   |                                                   *****   *****   *****
20 +                                                   *****   *****   *****
   |                                                   *****   *****   *****
   |                                                   *****   *****   *****
   |                                                   *****   *****   *****
   |                                                   *****   *****   *****
15 +                                                   *****   *****   *****
   |                                                   *****   *****   *****
   |                                                   *****   *****   *****
   |                                                   *****   *****   *****
   |                                           *****   *****   *****   *****
10 +                                           *****   *****   *****   *****
   |                                           *****   *****   *****   *****
   |                                           *****   *****   *****   *****
   |                                           *****   *****   *****   *****
   |                                           *****   *****   *****   *****
 5 +                                   *****   *****   *****   *****   *****
   |                                   *****   *****   *****   *****   *****
   |                           *****   *****   *****   *****   *****   *****
   |                   *****   *****   *****   *****   *****   *****   *****
   |   *****   *****   *****   *****   *****   *****   *****   *****   *****
  ----------------------------------------------------------------------------
         60      65      70      75      80      85      90      95     100

                    Liveborn Calving Rate - Midpoint

           NUMBER MAX AVERAGE STD PCTL90 PCTL75 MEDIAN PCTL25 PCTL10
            1220  130    91.7 9.3 100        98     93     88    79.5
```

Figure 11. Distribution of STILLBORN RATE (%) in 1989

```
 Percentage

   |  ***
   |  ***
   |  ***
35 +  ***
   |  ***
   |  ***
   |  ***
   |  ***
30 +  ***
   |  ***
   |  ***
   |  ***
   |  ***
25 +  ***
   |  ***
   |  ***
   |  ***
   |  ***
20 +  ***
   |  ***
   |  ***
   |  ***
   |  ***
15 +  ***
   |  ***
   |  ***
   |  ***   ***
   |  ***   ***
10 +  ***   ***
   |  ***   ***   ***
   |  ***   ***   ***   ***
   |  ***   ***   ***   ***   ***
   |  ***   ***   ***   ***   ***   ***
 5 +  ***   ***   ***   ***   ***   ***
   |  ***   ***   ***   ***   ***   ***   ***   ***                                 ***
   |  ***   ***   ***   ***   ***   ***   ***   ***   ***                           ***
   |  ***   ***   ***   ***   ***   ***   ***   ***   ***   ***         ***         ***
   |  ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***         ***
   |
   --------------------------------------------------------------------------------------
     0     2     3     4     5     6     7     8     9     10    11    12    13    14

                            Stillborn Rate - Midpoint

                  NUMBER MAX AVERAGE STD PCTL90 PCTL75 MEDIAN PCTL25 PCTL10
                   1217   38   3.6   4.4    9      6      2      0      0
```

Figure 12. Distribution of ASSISTED CALVING RATE (%) in 1989

```
Percentage

   |  ****
   |  ****
   |  ****
14 +  ****
   |  ****
   |  ****
   |  ****
12 +  ****                 ****
   |  ****                 ****                                                    ****
   |  ****                 ****                                                    ****
   |  ****                 ****                                                    ****
10 +  ****          ****   ****          ****                                      ****
   |  ****          ****   ****   ****   ****                                      ****
   |  ****          ****   ****   ****   ****                                      ****
   |  ****          ****   ****   ****   ****                                      ****
 8 +  ****          ****   ****   ****   ****                                      ****
   |  ****          ****   ****   ****   ****   ****                               ****
   |  ****          ****   ****   ****   ****   ****                               ****
   |  ****   ****   ****   ****   ****   ****   ****                               ****
 6 +  ****   ****   ****   ****   ****   ****   ****   ****                        ****
   |  ****   ****   ****   ****   ****   ****   ****   ****                        ****
   |  ****   ****   ****   ****   ****   ****   ****   ****                        ****
   |  ****   ****   ****   ****   ****   ****   ****   ****                        ****
 4 +  ****   ****   ****   ****   ****   ****   ****   ****   ****   ****          ****
   |  ****   ****   ****   ****   ****   ****   ****   ****   ****   ****   ****   ****
   |  ****   ****   ****   ****   ****   ****   ****   ****   ****   ****   ****   ****
   |  ****   ****   ****   ****   ****   ****   ****   ****   ****   ****   ****   ****
 2 +  ****   ****   ****   ****   ****   ****   ****   ****   ****   ****   ****   ****
   |  ****   ****   ****   ****   ****   ****   ****   ****   ****   ****   ****   ****
   |  ****   ****   ****   ****   ****   ****   ****   ****   ****   ****   ****   ****
   |  ****   ****   ****   ****   ****   ****   ****   ****   ****   ****   ****   ****
------------------------------------------------------------------------------------------
     0      2      4      6      8      10     12     14     16     18     20     22

                      Assisted Calving Rate - Midpoint

        NUMBER MAX AVERAGE STD  PCTL90 PCTL75 MEDIAN PCTL25 PCTL10
         1209  100   10.4  10.4   23     14      8      3      0
```

Figure 13. Distribution of CALF MORTALITY RATE (%) in 1989

```
    Percentage

     |  ****
     |  ****
  45 +  ****
     |  ****
     |  ****
     |  ****
     |  ****
  40 +  ****
     |  ****
     |  ****
     |  ****
     |  ****
  35 +  ****
     |  ****
     |  ****
     |  ****
     |  ****
  30 +  ****
     |  ****
     |  ****
     |  ****
     |  ****
  25 +  ****
     |  ****
     |  ****
     |  ****
     |  ****
  20 +  ****
     |  ****
     |  ****
     |  ****
     |  ****
  15 +  ****
     |  ****
     |  ****
     |  ****        ****
     |  ****  ****  ****
  10 +  ****  ****  ****
     |  ****  ****  ****
     |  ****  ****  ****  ****
     |  ****  ****  ****  ****
     |  ****  ****  ****  ****  ****
   5 +  ****  ****  ****  ****  ****  ****
     |  ****  ****  ****  ****  ****  ****                          ****
     |  ****  ****  ****  ****  ****  ****                          ****
     |  ****  ****  ****  ****  ****  ****  ****  ****  ****        ****
     |  ****  ****  ****  ****  ****  ****  ****  ****  ****  ****  ****
     |
     ---------------------------------------------------------------------
         0     2     4     6     8    10    12    14    16    18    20

                       Calf Mortality Rate - Midpoint

        NUMBER MAX AVERAGE STD PCTL90 PCTL75 MEDIAN PCTL25 PCTL10
         1169   66    4.2   6.6  12       6      2      0      0
```

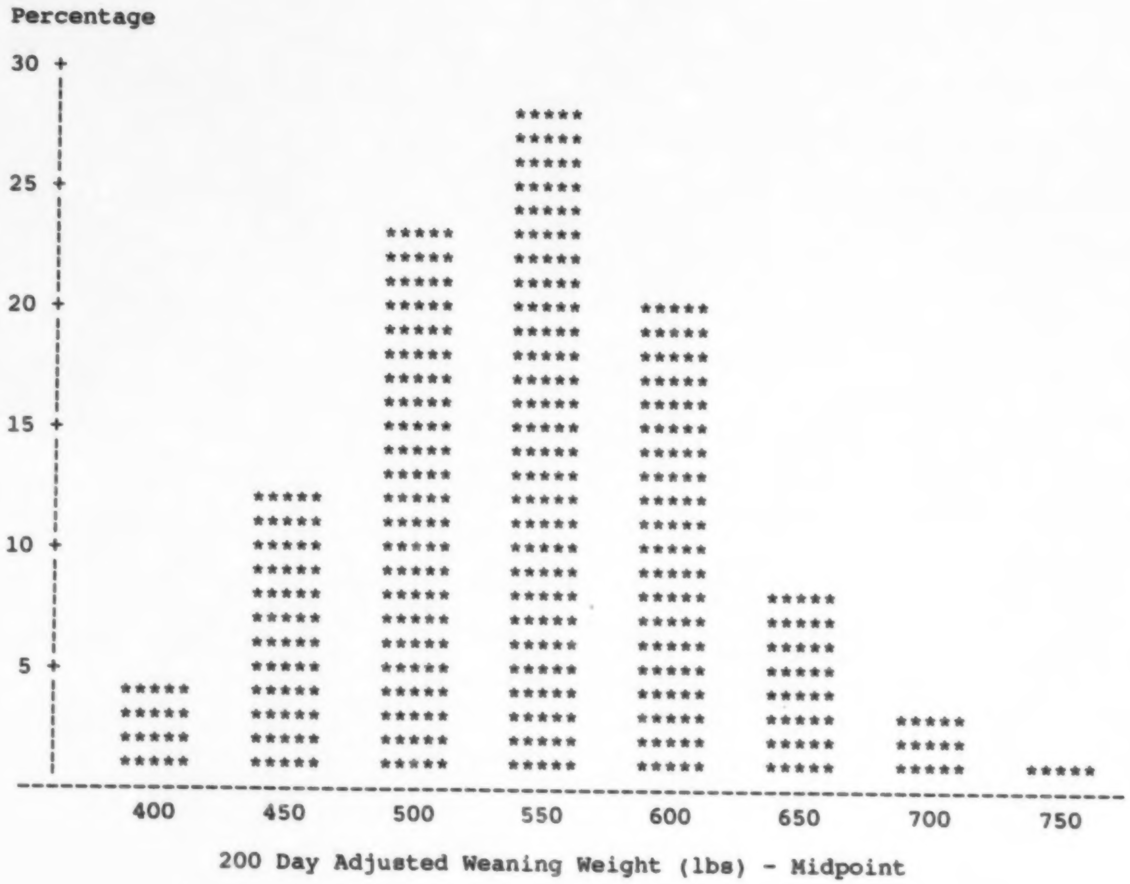
Figure 14. Distribution of TREATMENT RATE (%) for Calves in 1989

```
Percentage

30 +
   |
   |
   |
   |
25 +
   |
   |   ***
   |   ***
   |   ***
20 +   ***
   |   ***
   |   ***   ***
   |   ***   ***
   |   ***   ***
15 +   ***   ***
   |   ***   ***   ***
   |   ***   ***   ***
   |   ***   ***   ***
   |   ***   ***   ***
10 +   ***   ***   ***
   |   ***   ***   ***   ***   ***
   |   ***   ***   ***   ***   ***                                                   ***
   |   ***   ***   ***   ***   ***                                                   ***
   |   ***   ***   ***   ***   ***   ***                                             ***
 5 +   ***   ***   ***   ***   ***   ***                                             ***
   |   ***   ***   ***   ***   ***   ***   ***                                       ***
   |   ***   ***   ***   ***   ***   ***   ***   ***                                 ***
   |   ***   ***   ***   ***   ***   ***   ***   ***         ***                     ***
   |   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***   ***
  -------------------------------------------------------------------------------------------
        0     5    10    15    20    25    30    35    40    45    50    55    60    80

                       Treatment Rate for Calves - Midpoint

               NUMBER MAX AVERAGE STD  PCTL90 PCTL75 MEDIAN PCTL25 PCTL10
                1181  132   20.5  26.8   53     25     11      3      0
```

Figure 15. Distribution of **WEANED CALF CROP RATE (%)** in 1989

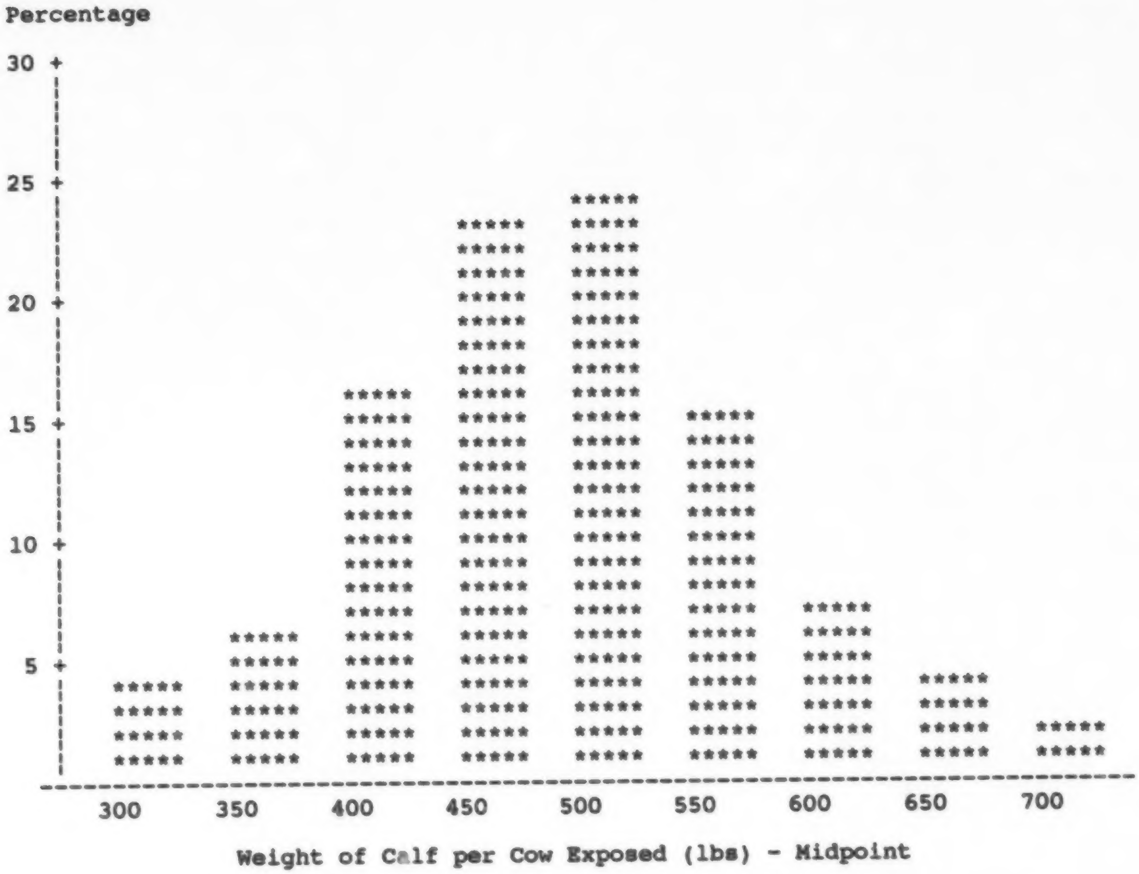
```
    Percentage

30 +
   |
   |
   |
   |
25 +
   |
   |
   |
   |                                            ****  ****
20 +                                            ****  ****
   |                                            ****  ****
   |                                            ****  ****
   |                                      ****  ****  ****
   |                                      ****  ****  ****
15 +                                      ****  ****  ****  ****
   |                                      ****  ****  ****  ****
   |                                      ****  ****  ****  ****
   |                                      ****  ****  ****  ****
   |                                      ****  ****  ****  ****
10 +                                      ****  ****  ****  ****
   |                                ****  ****  ****  ****  ****
   |                                ****  ****  ****  ****  ****
   |                          ****  ****  ****  ****  ****  ****
   |                          ****  ****  ****  ****  ****  ****
 5 +                          ****  ****  ****  ****  ****  ****
   |                          ****  ****  ****  ****  ****  ****
   |                    ****  ****  ****  ****  ****  ****  ****  ****
   |              ****  ****  ****  ****  ****  ****  ****  ****  ****
   |  ****  ****  ****  ****  ****  ****  ****  ****  ****  ****  ****
   -----------------------------------------------------------------------
       55    60    65    70    75    80    85    90    95   100   105

                      Weaned Calf Crop Rate - Midpoint

        NUMBER MAX AVERAGE STD  PCTL90 PCTL75 MEDIAN PCTL25 PCTL10
         1218  186   88.4  11.1  100     95     90     83     74
```

Figure 16. Distribution of 200 Day Adjusted WEANING WEIGHT in 1989



```
NUMBER MAX AVERAGE STD   PCTL90 PCTL75 MEDIAN PCTL25 PCTL10
 1205  801  544.3  71.7  635     589    545    499    450
```

Figure 17. Distribution of WEIGHT of CALF per COW EXPOSED in 1989



NUMBER	MAX	AVERAGE	STD	PCTL90	PCTL75	MEDIAN	PCTL25	PCTL10
1199	1259	481.3	90.6	590	533	478	424	378